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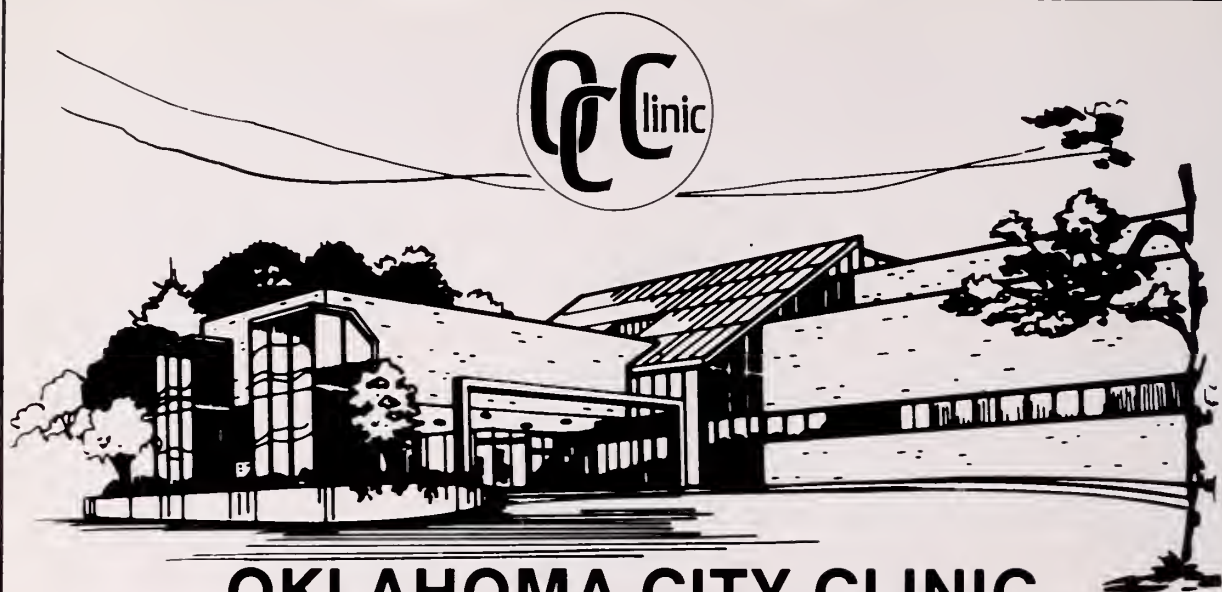
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JOURNAL

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Oklahoma State Medical Association





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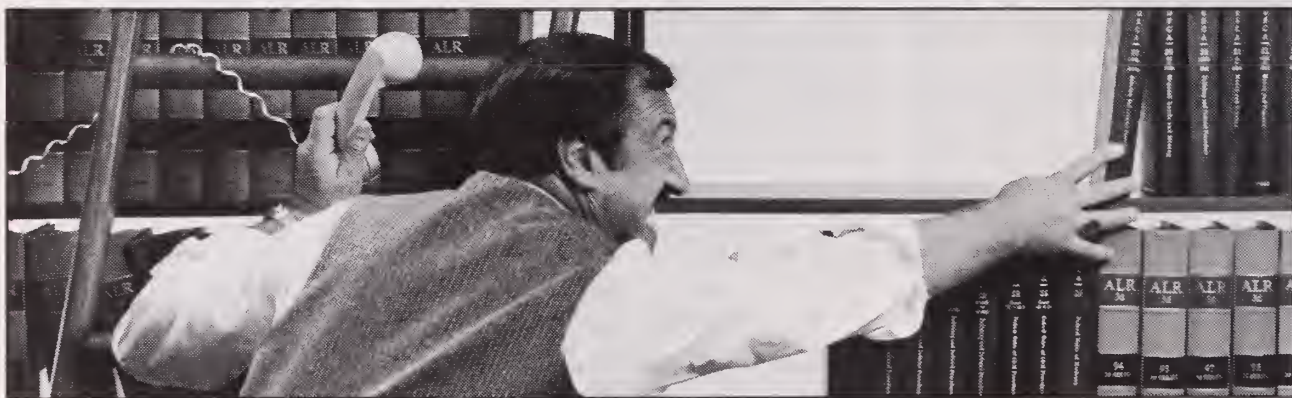
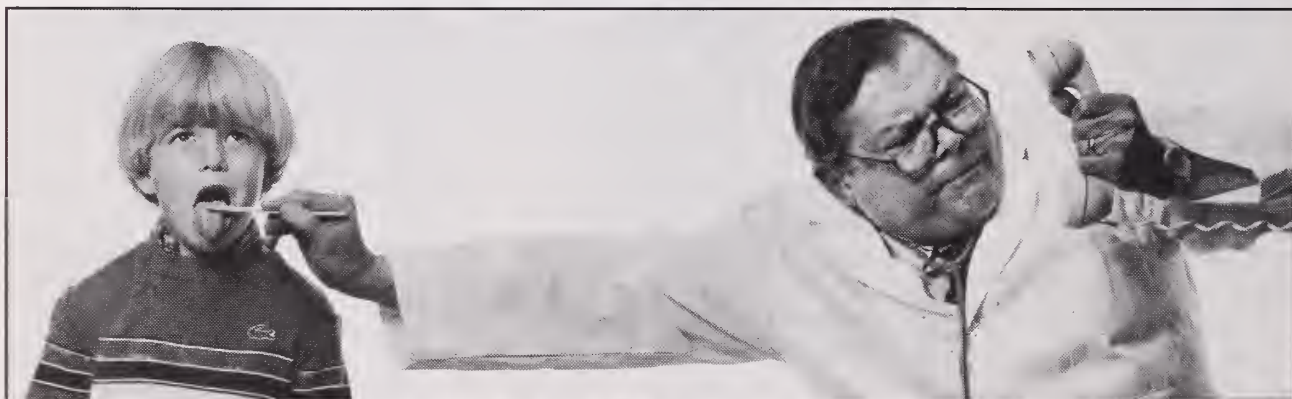
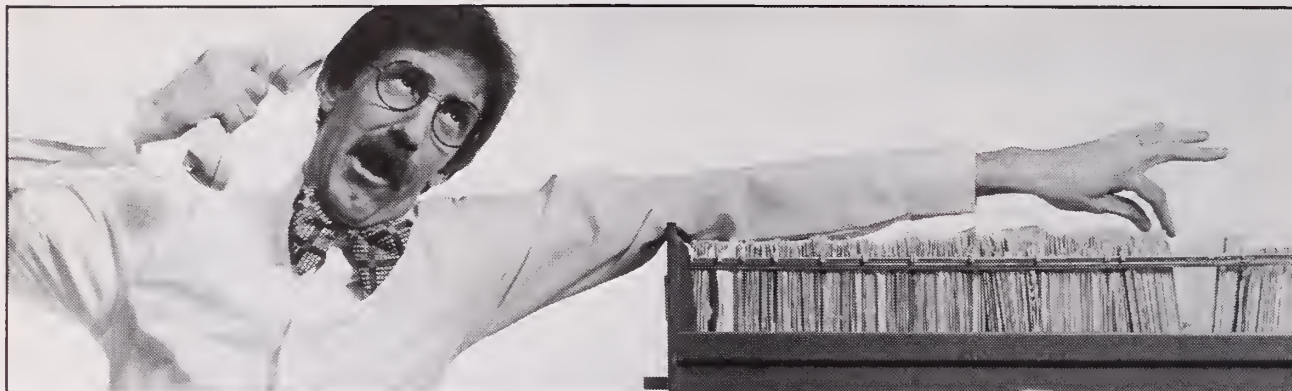
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BRIEF SUMMARY PROCARDIA® CAPSULES (nifedipine)

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INDICATIONS AND USAGE: I. **Vasospastic Angina:** PROCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria: 1) classical pattern of angina at rest accompanied by ST segment elevation, 2) angina or coronary artery spasm provoked by ergonovine, or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography, the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PROCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e.g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm, or when angina is refractory to nitrates and/or adequate doses of beta blockers.

II. **Chronic Stable Angina (Classical Effort-Associated Angina):** PROCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or organic nitrates or who cannot tolerate those agents.

In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in those patients are incomplete.

Controlled studies in small numbers of patients suggest concomitant use of PROCARDIA and beta blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs. (See Warnings.)

CONTRAINDICATIONS: Known hypersensitivity reaction to PRDCARDIA.

WARNINGS: **Excessive Hypotension:** Although in most patients, the hypotensive effect of PROCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension. These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers.

Severe hypotension and/or increased fluid volume requirements have been reported in patients receiving PRDCARDIA together with a beta blocking agent who underwent coronary artery bypass surgery using high dose fentanyl anesthesia. The interaction with high dose fentanyl appears to be due to the combination of PROCARDIA and a beta blocker, but the possibility that it may occur with PROCARDIA alone, with low doses of fentanyl, in other surgical procedures, or with other narcotic analgesics cannot be ruled out.

Increased Angina: Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PROCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Beta Blocker Withdrawal: Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines. Initiation of PRDCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PRDCARDIA initiation. It is important to taper beta blockers if possible, rather than stopping them abruptly before beginning PROCARDIA.

Congestive Heart Failure: Rarely, patients, usually receiving a beta blocker, have developed heart failure after beginning PROCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event.

PRECAUTIONS: **General:** **Hypotension:** Because PRDCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PROCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. (See Warnings.)

Peripheral edema: Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PROCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy. With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Drug interactions: Beta-adrenergic blocking agents: (See Indications and Warnings.) Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PROCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina.

Long-acting nitrates: PRDCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Digitalis: Administration of PRDCARDIA with digoxin increased digoxin levels in nine of twelve normal volunteers. The average increase was 45%. Another investigator found no increase in digoxin levels in thirteen patients with coronary artery disease. In an uncontrolled study of over two hundred patients with congestive heart failure during which digoxin blood levels were not measured, digitalis toxicity was not observed. Since there have been isolated reports of patients with elevated digoxin levels, it is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing PROCARDIA to avoid possible over- or under-digitalization.

Carcinogenesis, mutagenesis, impairment of fertility: When given to rats prior to mating, nifedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose.

Pregnancy: Category C. Please see full prescribing information with reference to teratogenicity in rats, embryotoxicity in rats, mice and rabbits, and abnormalities in monkeys.

ADVERSE REACTIONS: The most common adverse events include dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%. Syncopal episodes did not recur with reduction in the dose of PRDCARDIA or concomitant antianginal medication. Additionally, the following have been reported: muscle cramps, nervousness, dyspnea, nasal and chest congestion, diarrhea, constipation, inflammation, joint stiffness, shakiness, sleep disturbances, blurred vision, difficulties in balance, dermatitis, pruritus, urticaria, fever, sweating, chills, and sexual difficulties. Very rarely, introduction of PROCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related. Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

Laboratory Tests: Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CPK, LDH, SGOT, and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nifedipine therapy. The relationship to PROCARDIA therapy is uncertain. These laboratory abnormalities have rarely been associated with clinical symptoms. Cholestasis, possibly due to PROCARDIA therapy, has been reported twice in the extensive world literature.

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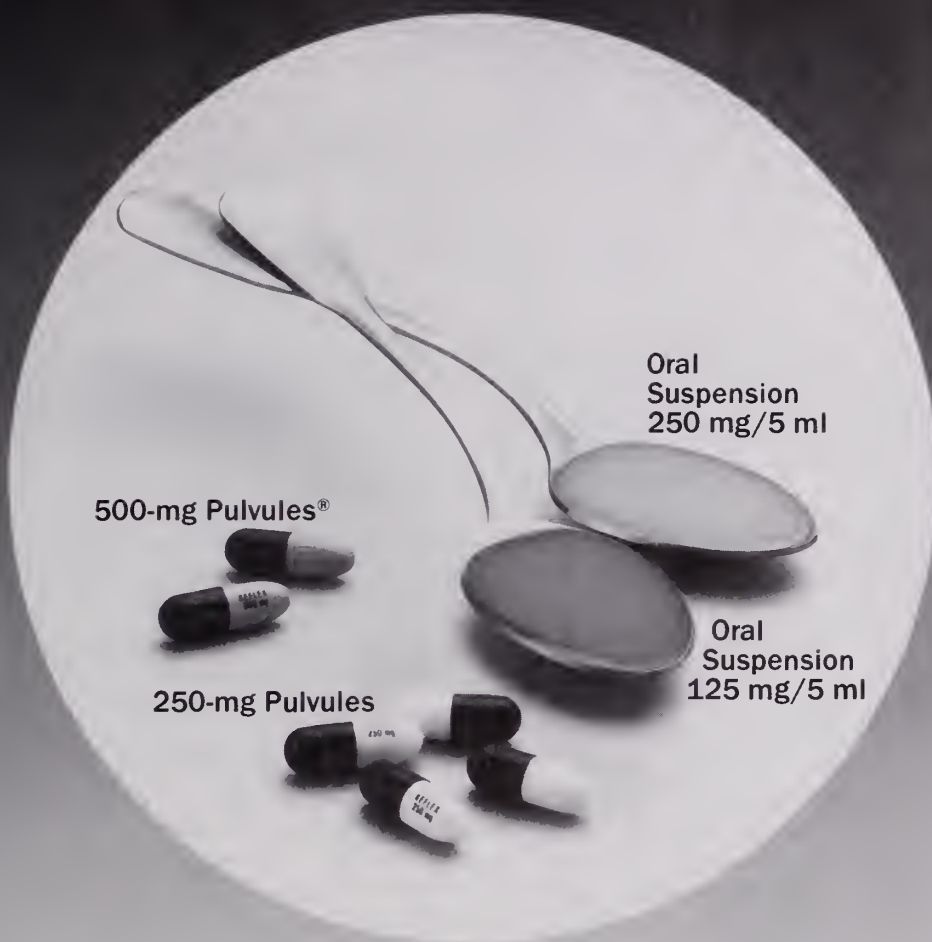
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Charles S. Givens Interests

Sentenced but not guilty

Now that most of us have agreed to freeze our fees — until early next year at least — it has been quietly noted that, between the years 1973 and 1982 our net incomes, adjusted for inflation, declined seven-tenths of one percent per year.

Public response to our self-flagellation has held no surprises either. Summed up, it is best characterized as, "Well, it's *about* time!"

Whether our cries of *mea culpa* will modify or delay our enslavement through the seizure of our hospital staffs by the bureaucracy is yet to be discovered. Chances that we will retain stewardship of our hospital staff policies seem slightly less than our chances for a ten-inch snowfall here in Oklahoma in late August.

Donning sackcloth and dusting ourselves with ashes will accomplish nothing of benefit. Such foolishness will, however, encourage us to accept guilt which is not ours, confess to felonies we have not committed, and promote a posture of submission and resignation to slavery.

If you are not ready for this you can resign from the profession of medicine or you can defend yourself and declare your intentions to your patients, your neighbors, your hospital administrators, and your elected representatives.

Should you choose to fight, you should arm yourself with the convictions of a crusader, resisting the role of a martyr but willing to accept a martyr's fate.

Stand up and speak out.

Ask each person who uses the term "health care" to define it. What does it include? What does it exclude? Does it include the cost of health insurance and the profits of the companies which sell it? Does it include the cost of over-the-counter drugs and hearing aids and vitamins and alfalfa pills? Does it include the cost of domiciliary care for the elderly or the orphaned or the mentally incompetent? Does it exclude the cost of saunas and whirlpool tubs and trips to spas and health resorts? Does it exclude the expenses involved in visiting faith healers and

naturopaths and witch doctors? Does it exclude the cost of elective cosmetic surgery and membership in sports clubs and aerobics classes and weight control groups?

Then ask who defines the term "health care," how often how recently and precisely how is it expanded and modified?

Of course you will discover that absolutely no one knows what the term "health care" means but absolutely everyone knows that it costs too much. (Surely someone, somewhere does have an ill-defined, vague, and varying list of the ingredients of "health care," and will eventually face you with it. When this happens your total lack of responsibility for its cost will be strikingly evident.)

As the second maneuver in your defense, point out that the average practicing physician in this country has seen his inflation-adjusted income fall seven-tenths of one percent every year between 1973 and 1982. Point out also that during those years you have assumed more and more liability, provided better and more effective care, and suffered steadily increasing criticism.

Finally, in your own defense, join the effort to discover the real definition of "health care," and the real culprits responsible for its intolerable costs. You are not one of the culprits. You are one of the principal victims — about to be sentenced to slavery or banishment from your own hospital.

If you endorse sackcloth and ashes, *mea culpa* and self-flagellation — if you believe you are among the guilty — if you think you know what "health care" is and that you can control its costs, stand up and be sentenced.

On the other hand, if you know you are not guilty, stand up and fight. Let the people in your community know that you are not guilty and that you refuse to be tried in the kangaroo court of distorted public opinion.

Discover the truth. It will set you free.

— MRJ

OSMA Council on Hospital Medical Staffs, a New Forum for Problem-Solving

A new Council, approved by the House of Delegates in May, is now a reality, ready to provide much-needed liaison between physicians on hospital staffs and OSMA; a forum for discussion of and eventual solutions to an avalanche of problems, past, present, and potential; a future avenue of valuable communication!



The Council Chairman is an OSMA statesman, Orange Miller Welborn, who has had a wealth of experience in his own hospital setting in Ada. He possesses an encyclopedic knowledge of most "alternate health care delivery systems" in existence and the ability to handle the types of debates and discussions expected out of the new Council! The Vice-Chairman, William O. "Bill" Coleman, is quite knowledgeable also and, further, has participated in the Hospital

Medical Staff Section of the AMA since its inaugural meeting in June 1983.

An attempt has been made to have an appointee selected from each hospital medical staff in the state. Only 27 have been appointed as of June 1 but more may be added to provide representation where representation is desired; the appointment needs to be initiated by the Chief-of-Staff, through me, and the appointee must be an OSMA member, of course.

If you don't find *your* hospital staff appointee listed in the June 1 roster of OSMA Council on Hospital Medical Staffs, stimulate your Chief-of-Staff to get to me an appointee's name that is satisfactory to your staff members.

A handwritten signature in dark ink, appearing to read "O. M. Welborn, M.D." with a stylized flourish at the end.

Genetic Counseling: An Integral Component of Primary Medical Care

BARBARA L. VOGT, MS
BURHAN SAY, MD

Genetic counseling is an ever-growing field which is still not fully used by primary care physicians and can be a resource when physicians encounter special problems related to medical genetics.

In recent years, much interest has been generated about the field of genetic counseling; indeed, about the delineation of the genetic basis of human disease. Physicians have been challenged with the task of familiarizing themselves with the rapidly growing body of knowledge of genetic factors in disease and with the services available from genetic centers. The role of the primary physician on the genetic counseling team is sometimes obscure, and thus may be in need of clarification.

Medical geneticists recognize that sometimes complex medical entities need to be related to the patient and his family. The presence of a genetic condition in a family has a great

impact on intrafamilial relationships, especially on decisions regarding reproduction. The American Society of Human Genetics undertook a study to address this issue and in 1975 published a definition of the term "genetic counseling":

Genetic counseling is a communication process which deals with the human problems associated with the occurrence, or the risk of occurrence, of a genetic disorder in a family. This process involves an attempt by one of more appropriately trained persons to help the individual or family to:

- (1) comprehend the medical facts, including the diagnosis, probable course of the disorder, and the available management;

- (2) appreciate the way heredity contributes to the disorder, and the risk of recurrence in specified relatives;

- (3) understand the alternatives for dealing with the risk of recurrence;

- (4) choose the course of action which seems to them appropriate in view of their risk, their family goals, and their ethical and religious standards, and to act in accordance with that decision; and,

- (5) to make the best possible adjustment to the disorder in an affected family member and/or to the risk of recurrence of that disorder.¹

(continued)

Genetic counseling and diagnostic services have become an integral part of medical care in most states, due largely to funding available from federal sources under the National Genetic Disease Act of 1976. To serve large geographical areas, many states, including Oklahoma, have developed outreach programs in which the genetics specialty team travels from the hospital- or university-based genetics center to satellite clinics established strategically throughout the state. In the short three years of its existence, Oklahoma's Outreach Program has been felt to be an asset to many practicing physicians.

A variety of professionals are involved in the "team approach" to genetic counseling, in which each professional contributes from his or her area of expertise. Participants include medical geneticists (with one to two years specialized training in human genetics); PhDs in the area of genetics, biochemistry, or other related fields; genetic associates (with Masters degrees in medical genetics, counseling, and communication skills); and nurses and nurse practitioners. Social workers, psychologists, psychiatrists, and chaplains may also be included. The primary physician joins this group to complete the genetics team, and offers, as a unique contribution, valuable information about the patient and particular family interactions.

Additionally, the primary care physician, when encountering questions regarding inheritance of diseases, may counsel the patient on many occasions regarding diagnosis, prognosis, and risk of recurrence. For example, in Down's syndrome, chromosome analysis of a peripheral blood sample reveals Trisomy 21, and the prognosis and recurrence risk are fairly clear cut. The physician gently delivers the diagnosis and prognosis to the parents, talks with them about their reactions and future plans, and cares for the patient and family in the years ahead. This is the essence of genetic counseling. In other instances, however, the primary physician or local health professional may refer the family to a genetic outreach clinic for further evaluation, but still provide the emotional support and continuity that a distant specialist is not able to convey.

Over 3,300 disorders have been confirmed as being hereditary in nature.² Many birth defects appear to be isolated problems, but may actually represent partial expressions of inher-

ited syndromes. For example, a cleft lip and palate may be explained to a family as being of multifactorial inheritance, with a 2% to 4% chance of recurrence. If careful examination reveals the presence of lip pits or mounds (mucous cysts in the lips), the condition, known as Van der Woude's syndrome, is inherited in a dominant fashion and carries a 50% risk of recurrence. Geneticists are specifically trained to differentiate these syndromes. Several syndromes (for example, the ectodermal dysplasias) may be inherited in one of many ways: dominantly, recessively, or in an X-linked fashion.

**Over 3,300 disorders
have been confirmed
as being hereditary
in nature.**

Geneticists have a different approach in diagnosing genetic disorders. Great attention is paid to details of a patient's appearance, and to assessment of variations from the norm. This is particularly true of the eyes, face, ears, and hands. The study of fingertip ridges and palmar creases is often informative and is referred to as dermatoglyphics. Chromosome analysis and specialized biochemical tests for rare inborn errors of metabolism are sometimes necessary and available through a genetic laboratory. Essential in every genetic work-up is delineation of a family health history, referred to as a pedigree. This substantiates the genetic nature of the condition and has direct impact on the recurrence risk appropriate for the family.

Geneticists may also aid the primary physician by suggesting and evaluating possible treatment regimens. Individuals found to have PKU (phenylketonuria) may be placed on a diet low in phenylalanine to diminish the mental deficiency that is historically a part of the condition.

Referral to a genetics unit for the purpose of diagnosis is just one of the services available to primary physicians in the community. Another service is genetic counseling following a diagnosis. Emphasis is placed on the "communication process" of genetic counseling, as mentioned previously. The diagnosis and prognosis are explained to the patient and/or family,

as is the pattern of inheritance. Support services in the community are introduced if assistance with a handicapping condition is needed. Referrals may be made to other specialists, and the family may be put in contact with parent support groups or national organizations. Other family members may be diagnosed through carrier testing. One unique aspect of genetic counseling is a nondirective attitude on the part of members of a genetics team. Geneticists do not advise or direct patients to act in a prescribed way; all decisions are left to the individuals involved.

Geneticists keep abreast of the ever-increasing repertoire of conditions that can be diagnosed prenatally through amniocentesis, ultrasound examination, and maternal serum alpha-fetoprotein determination. Over 85 metabolic diseases are amenable to prenatal diagnosis through enzyme studies of cultured amniotic fluid cells.³ New techniques, such as DNA restriction analysis of cultured cells of fetuses at risk for sickle cell anemia or thalassemia, promise significant advances in prenatal diagnosis in the future. Prenatal diagnosis is a relatively new field to which the patient may react with hesitation and confusion. Genetic counseling for prenatal diagnosis consists of meeting with the couple, assessing the indications for such testing, and explaining the procedures involved. In addition, this initial contact with the expectant couple lays the foundation for a future therapeutic relationship should the prenatal testing reveal an abnormal fetus.

In spite of the recent advances in the understanding of genetic factors in diseases and birth defects, there remains a significant proportion of cases in which a diagnosis or prognosis cannot be made. This represents an opportunity to study new syndromes or new variants of well-established syndromes. By contributing to the body of medical knowledge of a genetic condition, a physician may be of service to numerous families in the future who may directly benefit from his clinical experience.

In summary, the primary physician plays a very important role in the smooth operation of the genetics team. Commonly, it is the primary physician who has recognized the genetic nature of a trait. He refers the patient for genetic evaluation and explains to the family mem-

bers the mechanisms of inheritance and the diagnostic procedures. He implements the proposed treatment regimens and monitors the patient's progress. He provides the encouragement needed by the family in order to best utilize the medical specialty. He is the link between medical progress and the human needs of daily living. He is absolutely crucial to the workings of an outreach organization. In fact, the Oklahoma Statewide Genetics Outreach Program considers the genetic center a "tertiary center" (third in order) as compared to the "primary" care responsibilities of the local physician or health professional who has daily charge of the patient.

As the field of genetics becomes larger and more complex, the need for genetics specialty teams will continue to grow. Nevertheless, it is the primary physician, by successfully integrating the outreach team with his patients, who will be the key to successful delivery of genetic services.

A listing of genetic centers and free outreach clinics is available in the October 1982 issue of the *Journal of the Oklahoma State Medical Association* (volume 75, number 10, page 348) or by inquiring at the Maternal and Child Health Division of the State Department of Health in Oklahoma City at (405) 271-4471. A sixth outreach clinic has recently opened in Bartlesville, with appointments being made through Barbara Kell, RN, (918) 336-4823.

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In Vitro Activity of Netilmicin

S. M. HUSSAIN QADRI, PhD
STEVE JOHNSON

Netilmicin, a semisynthetic aminoglycoside, demonstrated more effective in-vitro activity than gentamicin and tobramycin against members of Enterobacteriaceae and Pseudomonas aeruginosa.

The in-vitro activity of netilmicin was compared to gentamicin, tobramycin, amikacin, ampicillin, carbenicillin, cephalosporin, chloramphenicol, methicillin, clindamycin, erythromycin, nitrofurantoin, tetracycline, and trimethoprim sulfamethoxazole against 1,634 strains of gram-positive and gram-negative bacteria. Of the 1,104 strains of *Enterobacteriaceae* tested, 1,100 (99.6%) were sensitive to netilmicin. Ninety-one percent of isolates of *Pseudomonas aeruginosa*, 85.0% of *Ps fluorescens*, and 75.0% of *Ps maltophilia* were also inhibited by this antibiotic. The majority of the strains of *Staphylococcus aureus* (97.0%), enterococci (81.0%), and *Streptococcus pneumoniae* (100%) were susceptible to this semisynthetic aminoglycoside. Netilmicin was found to be more effective than gentamicin, tobramycin,

and other commonly used antibiotics. Its overall spectrum was comparable to amikacin.

Introduction

Netilmicin is a semisynthetic aminoglycoside that is the 1-N-ethyl derivative of sisomicin. Since 1976 this antibiotic has been extensively studied to determine its efficacy in the treatment of infections caused by both gram-positive and gram-negative bacteria. Many investigators reported its antibacterial spectrum comparable to gentamicin and tobramycin.^{1,6-8} Stewart et al¹⁰ found it to be more effective than gentamicin and tobramycin against *Serratia*, whereas Eickhoff and Ehret² reported that it was four- to eight- fold less active than gentamicin against this bacterium. Unlike gentamicin, netilmicin is active against many aminoglycoside-resistant strains that produce the aminoglycoside adenylating enzyme ANT (2'') and aminoglycoside acetylating enzymes AAC (3)-I and AAC (3)-III.⁷ In this paper we report the in-vitro activity of netilmicin against 1,634 clinical isolates in a major teaching hospital in Oklahoma. The susceptibility pattern of these strains is also compared with gentamicin, tobramycin, amikacin, and other antibiotics that are commonly used in the community.

Materials and Methods

Antimicrobial Agents. Agar diffusion tests were performed using commercially prepared antibiotic discs (Difco Laboratories, Detroit). Netilmicin (30 μ g) discs were obtained from Schering Corporation (Kenilworth, NJ). The antibiotic content of the discs was 10 μ g for ampicillin, colistin, gentamicin, and tobramycin; 15 μ g for erythromycin; 30 μ g for amikacin, cephalothin, chloramphenicol, tetracycline, and vancomycin; 1.23 μ g, 23.75 μ g for trimethoprim-sulfamethoxazole; 10 units for penicillin G; 100 μ g for carbenicillin, and 5 μ g for methicillin. The disc contents used are those recommended by the National Committee for Clinical Laboratory Standards (1981), for which interpretive data have been established.

Bacteria. 1,634 isolates from clinical specimens were tested over a six-month period at Oklahoma Memorial Hospital, a 340-bed general medical and surgical hospital for adults which serves as a primary teaching institution for the University of Oklahoma Health Sciences Center. Microorganisms were identified by conventional methods described in the *Manual of Clinical Microbiology*.⁴ These bacteria con-

sisted of 1,104 strains of *Enterobacteriaceae*, 144 strains of *Ps aeruginosa*, 212 *S aureus*, and 161 *Streptococcus* species. The isolates were obtained from blood cultures, respiratory cultures, urines, wounds, and miscellaneous sources.

Susceptibility Testing. Antibiotic disc susceptibility testing was performed according to the procedure described by the National Committee for Clinical Laboratory Standards (1981). Microorganisms were considered susceptible to netilmicin if the zone size was equal to or greater than 15 mm, intermediate if 13 mm to 14 mm, and resistant if the zone size was equal to or less than 12 mm. Quality control organisms included in daily testing were *E coli* ATCC 25922, *S aureus* ATCC 25923, and *Ps aeruginosa* ATCC 27853. Mueller-Hinton agar (Difco, Detroit), with a pH between 7.2 and 7.4 was used in the tests. The susceptibility plates were incubated for 18 to 24 hours at 35°C.

Results

All the microorganisms used during this investigation were isolated from clinical specimens at Oklahoma Memorial Hospital, Oklahoma

Table 1. Susceptibility of *Enterobacteriaceae* and *Pseudomonas* to Netilmicin and Other Commonly Used Antimicrobial Agents

Organisms	Total Isolates	Percent Susceptible										
		AM	AN	CB	CR	C	GM	NE	Nitro	TE	TM	SxT
<i>Citrobacter diversus</i>	6	17	100	17	100	100	100	100	100	67	100	100
<i>C freundii</i>	20	50	100	80	55	100	100	100	100	90	100	100
<i>Enterobacter aerogenes</i>	29	20	100	90	03	86	100	100	100	79	90	100
<i>E agglomerans</i>	16	06	94	94	06	62	94	100	50	81	94	100
<i>Ecloacae</i>	68	16	100	91	04	97	97	100	100	79	97	100
<i>Escherichia coli</i>	570	70	100	74	86	94	99	100	99	80	99	98
<i>Klebsiella pneumoniae</i>	210	05	100	06	90	88	97	99	82	81	97	93
<i>Proteus Mirabilis</i>	109	89	100	95	93	87	95	100	06	0	95	84
<i>P rettgeri/Pmorganii</i>	15	40	100	100	06	60	93	93	33	27	93	100
<i>P vulgaris</i>	11	27	100	100	18	91	100	100	100	55	100	100
<i>Serratia marcescens</i>	50	12	90	60	0	58	76	94	0	06	62	50
<i>Pseudomonas aeruginosa</i>	144	0	97	94	0	03	85	91	05	03	93	05
<i>Ps fluorescens</i>	6	0	100	83	0	50	100	85	0	33	100	100
<i>Ps maltophilia</i>	4	0	50	50	0	75	50	75		0	50	

AM = ampicillin, AN = amikacin, CB = carbenicillin, CR = cephalothin, C = chloramphenicol, GM = gentamicin, TE = tetracycline, TM = tobramycin, NE = netilmicin, Nitro = nitrofurantoin, SxT = trimethoprim sulfamethoxazole.

Table 2. Susceptibility of Gram-Positive Bacteria to Netilmicin and Other Commonly Used Antibodies

Organisms	Total Isolates	Percent Susceptible										
		AM	AN	CR	C	CL	E	GM	ME	NE	P	TE
<i>S aureus</i>	215	10	100	99	100	99	94	99	99	97	10	89
Group D enterococcus	119	100	0	13	94	0	69	82	0	81	07	20
<i>Streptococcus pneumoniae</i>	4	100	100	100	100	100	100	100	100	100	100	100
Group B streptococci	38	100	02	100	100	100	95	02	100	13	100	05

AM = ampicillin, AN = amikacin, CR = cephalothin, C = chloramphenicol, CL = clindamycin, E = erythromycin, GM = gentamicin, ME = methicillin, NE = netilmicin, P = penicillin, TE = tetracycline.

City. They consisted of 1,634 strains of *Citrobacter diversus*, *C freundii*, *Enterobacter aerogenes*, *E agglomerans*, *E cloacae*, *Escherichia coli*, *Klebsiella pneumoniae*, *Proteus mirabilis*, *P rettgeri*, *Pmorganii*, *P vulgaris*, *Serratia marcescens*, *Pseudomonas aeruginosa*, *Ps fluorescens*, *Ps maltophilia*, *S aureus*, Group D enterococcus, *Streptococcus pneumoniae*, and Group B streptococci. These bacteria were isolated from urine (35%), respiratory tract (14%); genital sources (7%), blood (5%), and other body fluids, wounds, and tissues (39%). The in-vitro activity of netilmicin and other antibiotics was determined by the disk diffusion test.

A total of 1,258 strains of gram-negative and 376 strains of gram-positive bacteria were tested. The susceptibility pattern of gram-negative bacteria is shown in Table 1. Ninety-eight percent of all these bacteria were sensitive to netilmicin, whereas only 43% were susceptible to ampicillin, 68% to carbenicillin, 63% to cephalosporin, 82% to chloramphenicol, 71% to nitrofurantoin, 63% to tetracycline, and 83% were inhibited by trimethoprim-sulfamethoxazole. Getamicin and tobramycin caused the inhibition of 95% and 93% of these organisms, respectively. Only amikacin was found to be more effective, with 99% of the strains being susceptible to this aminoglycoside. Of the 154 strains of pseudomonads tested, 91% of *Ps aeruginosa*, 85% of *Ps fluorescens* and three of the four strains of *Ps maltophilia* were sensitive to netilmicin.

Over 90% of strains of *S aureus* were inhibited by all the antibiotics that are generally used at Oklahoma Memorial Hospital, except ampicillin and penicillin, with 97% of the organisms being sensitive to netilmicin (Table 2). The activity of netilmicin against enterococci

was comparable to gentamicin but superior to all the other antibiotics with the exception of ampicillin and chloramphenicol. Like other aminoglycosides, it showed little activity against Lancefield Group B streptococci.

Of the
1,104 strains of
Enterobacteriaceae tested
99.6% were sensitive
to netilmicin.

Discussion

Aminoglycosides constitute a valuable group of therapeutic agents that are among the oldest known antibiotics. Since the isolation of streptomycin by Selman Waksman in 1944, a number of these antibiotics have been isolated from microorganisms or prepared semisynthetically. Currently more than twelve aminoglycosides are commercially available as therapeutic agents in various parts of the world, with an estimated sales of \$500,000,000 per year. Only four of these antibiotics, namely gentamicin, tobramycin, amikacin, and netilmicin, are commonly used at this time in the USA, and their importance in the treatment of infections caused by aerobic gram-negative bacteria is undisputed. However, the ability of bacteria to develop resistance and the renal and oto-toxicity to aminoglycosides are significant factors in determining a therapeutic regimen. Over the last ten years a number of bacteria, including pseudomonads, have shown increased resis-

tance to gentamicin and tobramycin. Netilmicin not only has been found to be active against microorganisms that exhibit resistance to gentamicin and tobramycin, but it has been reported to be less nephro- and oto-toxic and has greatly reduced chronic toxicity.^{5,7}

Miller et al^{7,8} reported that netilmicin was similar to gentamicin against sensitive strains of *Enterobacteriaceae* and was active against all the gentamicin- and tobramycin-resistant strains of this family. We found this to be true with the 1,103 strains of *Enterobacteriaceae*; only one strain of *P. morgani* that was resistant to gentamicin and tobramycin was also resistant to netilmicin. Other investigators have reached a similar conclusion, using clinical bacterial isolates.^{9,10} However, Eickhoff and Ehret,² using 636 clinical strains, found that of the five aminoglycosides used in the study, gentamicin was the most active antibiotic. Kantor and Norden³ reported that netilmicin was comparable to gentamicin except that (1) gentamicin was more active against *S. marcescens* and *Ps. aeruginosa*, (2) most strains of gentamicin-resistant *Enterobacteriaceae* were susceptible to netilmicin, and (3) netilmicin was more active than amikacin for all *Enterobacteriaceae* and *S. aureus*. At Oklahoma Memorial Hospital, amikacin was found to be comparable to netilmicin for *S. aureus* and *Enterobacteriaceae*. We further found that netilmicin was more active than gentamicin against *S. marcescens* and *Ps. aeruginosa*.

Meyer et al⁶ used 224 clinical isolates of gentamicin-resistant *Enterobacteriaceae* and *Ps. aeruginosa* and found that netilmicin was highly active against these organisms, but amikacin was more effective against *Ps. aeruginosa*. Our findings are consistent with this observation. Of the 23 gentamicin-resistant *Ps. aeruginosa* tested at Oklahoma Memorial

Hospital, 10 strains were sensitive to netilmicin and 19 to amikacin. Meyer et al⁶ speculated that this difference may be due to either permeability factors or resistance of amikacin to inactivation by enzymes produced by R factors.

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Various advantages result even from the publication of opinions; for though we are very liable to error in forming them, yet their promulgation, by exciting investigation, and pointing out the deficiencies of our information, cannot be otherwise than useful in the promotion of science.

— John Abernethy
Surgical and Physiological Works, Vol I, Preface

Paths to Progress III Quantitative Morphometric Analysis Laboratory

GEORGE HEMSTREET, PhD

Using the latest in computer technology, it is now possible to detect and diagnose cancer at the single cell level, a time when the odds for cure are greatest.

The Quantitative Morphometric Analysis Laboratory was established in 1983 as a research and service unit of the Clinical Laboratories of the State of Oklahoma Teaching Hospitals. This unique lab was developed to provide a diagnostic service to urologists and other clinicians throughout Oklahoma, as well as to conduct research to improve the sensitivity and specificity of cytopathologic evaluations, particularly exfoliated bladder and cervical cells.

Urinary cytology is the primary service now offered by this laboratory. Accurate interpretation of atypical diagnoses resulting from traditional cytologic methods has long been a problem for urologists. Conventional Pap cytology is accurate in detecting only 10% to 50% of Grade 1 and 2 tumors, which often necessitates repeated testing of some patients. Results of the quantitative fluorescence image analysis method used in this laboratory are

markedly more accurate, greater than 95%, even for low-grade tumors. This methodology is particularly useful for the early detection and diagnosis of bladder cancer, and for monitoring therapeutic regimens. In addition to the excellent results from evaluating exfoliated bladder cells, pilot cervical studies indicate that the the image analysis system may be very promising for differentiating malignant cervical dysplasia from that caused by inflammation. It is also anticipated that work will extend into pulmonary and gastric cytologies, which are often difficult areas.

The Leitz Texture Analyzing System (TAS), a computerized fluorescent microscope that automatically scans large numbers of cells on a slide and identifies single cells with increased nucleic acid content, is fundamental to the Quantitative Morphometric Analysis Laboratory. This microscope system is the only one of its kind in use in this country for biological application. The system and its biological applications have been developed over the past seven years by Dr Seymour West, from the University of Alabama in Birmingham, and Dr George Hemstreet, director of this laboratory.

The system is unique in that it identifies cancer cells based both on their images and on

quantitative measurements of the intensity of emitted nuclear fluorescence. When the cell is stained with fluorescent dye, the dye is absorbed by the nucleus in direct proportion to the amount of nucleic acid present. Those cells with elevated nucleic acid content are displayed on the video screen for evaluation by the cytotechnologist. In addition to the improved detection accuracy, the total time required to review a slide is only about three minutes, making it considerably faster than traditional methods. Sample preparation for this method is also considerably less involved than that for routine Pap cytology. This laboratory currently provides cytologic analyses to a statewide network of urologists upon request.

Quantitative image analysis is currently

being used for cytologic evaluations in a national program to screen workers at high risk for bladder cancer. This method was also reported in the December 1982 issue of the *International Journal of Cancer*.

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Certification of Emergency Medical Technicians

J. TED HERBELIN, MD
DAVID F. WHARTON, MPH

Emergency Medical Technicians are often thought of as merely ambulance drivers. With the passage of the Emergency Medical Services Improvement Act of 1981, rigorous training and certification requirements were placed upon these individuals, and the field of emergency medical technology has become a profession of its own.

A 1981 amendment to the Emergency Medical Services Improvement Act requires, for the first time in Oklahoma history, the licensure of ambulance services and emergency medical technicians (EMTs).

This legislation has prompted inquiries from Oklahoma's medical community as to the role of EMTs and the types of medical care they are qualified and licensed to perform. A recognition of the shared responsibilities of the EMT and the physician is fundamental to providing efficient emergency care to those persons faced with sudden illness or accident.

As required by the act, licensure is a responsibility of the State Board of Health, acting through the Commissioner of Health. The state health department's Emergency Medical Ser-

vices Division is authorized to monitor state ambulance services and EMTs to assure compliance. Training requirements for each EMT licensure level are established by the Technical Medical Direction Committee, which is composed of physicians, educators, emergency medical service administrators, EMTs, and EMT-paramedics. Appointed by the Commissioner of Health, the committee also provides guidance on technical and medical matters and is authorized to alter licensure requirements as needed.

As provided in Title 63, Sec 330.74 of the Oklahoma Statutes, there are four licensure levels of EMT, each consisting of specific education and training requirements. They are EMT-Basic, EMT-Advanced, EMT-Advanced/Cardiac, and EMT-Paramedic.

To be eligible for licensure as an EMT-Basic, an individual must be at least 18 years old and successfully complete a state health department approved EMT-Basic course of not less than 81 clock hours.

Oklahoma law states that the licensed EMT-Basic may perform patient assessment, including determination of vital and diagnostic signs and triage; bandaging, splinting, and control of hemorrhage; treatment of shock, includ-

Certification (continued)

ing use of pneumatic anti-shock trousers; cardiopulmonary resuscitation and use of adjunctive airway devices; rescue and extrication services; and other emergency medical care measures as indicated in the standard US Department of Transportation (USDOT) Basic Emergency Medical Technician training program.

Skills for the licensed EMT-Advanced level include those required for EMT-Basic, as well as administration of intravenous fluids, use and placement of definitive airway adjuncts, and venipuncture to obtain blood samples.

Besides performing all skills listed within the definition of EMT-Basic and EMT-Advanced, a licensed EMT-Advanced/Cardiac is qualified for recognition and interpretation of cardiac arrhythmias using a cardiac monitor; defibrillation and cardioversion; and administration of emergency drugs by parenteral, intramuscular, subcutaneous, and intradermal routes.

The Paramedic level represents the apex of the EMT training spectrum. In addition to being licensed as an EMT-Basic, an individual must have completed the entire USDOT EMT-Paramedic training course. A licensed EMT-Paramedic may perform all skills listed within the definition of EMT-Basic, EMT-Advanced, and EMT-Advanced/Cardiac; management of pediatric emergencies, including resuscitation, advanced airway placement, and parenteral

medication administration; management of obstetric/gynecologic emergencies; and psychiatric intervention, including parenteral administration of medications.

All EMTs should perform their designated duties according to procedures and protocols set forth by physicians currently licensed to practice in Oklahoma.

This review is provided in the hope that Oklahoma physicians, hospital medical staff, and other medical personnel will more fully understand the capabilities of EMTs. The quality of emergency care received by victims can be a matter of life or death. The physician-EMT relationship is vital to the emergency medical services system — a system which can save lives and decrease disabilities.

For further information concerning EMTs, contact the Emergency Medical Services Division of the Oklahoma State Department of Health, PO Box 53551, Oklahoma City, Oklahoma 73152, or telephone (405) 271-4027.

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Coauthor David Fredrick Wharton, MPH, earned his master's degree at the University of Oklahoma College of Public Health in 1983. He is a member of the National Association of Emergency Medical Technicians.

Do not stop to think about the reasons for what you are doing, about why you are questioning. Curiosity has its own reason for existence. One cannot help but be in awe when he contemplates the mysteries of eternity, of life, of the marvelous structure of reality. It is enough if one tries merely to comprehend a little of this mystery each day.
Never lose a holy curiosity.

— Albert Einstein



News from the Oklahoma State Department of Health

Gonorrhea in children

Gonorrhea is increasingly becoming the presenting problem of a child or young adolescent. Of the 14,284 cases of gonorrhea reported in Oklahoma for 1983, about one percent occurred in children or adolescents under 15 years of age. In children under 10 years of age, 38 cases were reported. From 10 through 14 years of age, 119 cases were reported. Girls represented 76 to 80 percent of the cases reported in children.

Primary infection with gonorrhea will usually present as vulvovaginitis in prepubertal females. It develops in the urethra of the male and the cervix of the postpubertal female. Children may also acquire gonorrheal infections of the eye, throat, and rectum, and rarely, may have generalized infections.

Prepubertal gonococcal infection outside the neonatal period should be considered pre-

sumptive evidence of sexual abuse. Sexual abuse of children may represent incest or extra-familial sexual molestation. Most cases of incest involve daughters and fathers or other adult male figures in the family.

Physicians who make a diagnosis of gonorrhea in a child are required to report the case to the state health department. In addition, physicians are required by law to report all known or suspected cases of child sexual abuse immediately to Children's Protective Services of the Oklahoma Department of Human Services.

Health care providers are often turned to for evaluation and treatment of the sexually abused child. Management must encompass sensitivity, empathy, and appropriate medical intervention while at the same time giving due consideration to the emotions of the sexually assaulted child, the accused perpetrator, and the often multitroubled family.

DISEASE	April 1984	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	4	6	4	7
CAMPYLOBACTER INFECTIONS	12	44	37	—
ENCEPHALITIS, INFECTIOUS	4	5	7	12
GIARDIA INFECTIONS	14	54	52	—
GONORRHEA (Use ODH Form 228)?	817	3998	5310	4955
HAEMOPHILUS INFLUENZAE INVASIVE DISEASE	14	69	60	—
HEPATITIS A	27	138	141	151
HEPATITIS B	33	108	83	72
HEPATITIS, NON-A NON-B	6	11	16	—
HEPATITIS UNSPECIFIED	9	36	72	72
MEASLES (RUBEOLA)	5	5	0	92
MENINGITIS, ASEPTIC	7	14	30	22
MENINGITIS, BACTERIAL (non-meningococcal, non H. Influenzae)	3	14	33	20
MENINGOCOCCAL INFECTIONS	1	14	17	15
PERTUSSIS	5	32	20	9
RABIES (Animal)	18	44	47	81
ROCKY MOUNTAIN SPOTTED FEVER	0	1	6	12
RUBELLA	0	0	0	3
SALMONELLA INFECTIONS	23	87	129	81
SHIGELLA INFECTIONS	6	36	44	70
SYPHILIS (Use ODH Form 228)	11	67	98	69
TETANUS	0	0	0	0
TUBERCULOSIS	10	67	97	116
TULAREMIA	0	1	4	1
TYPHOID FEVER	0	1	1	0

Diseases of Low Frequency	Total to Date This Year	
ACQUIRED IMMUNE DEFICIENCY SYNDROME	4	
BRUCELLOSIS	2	
LEGIONNAIRES DISEASE	4	
MALARIA	2	
REYE SYNDROME	10	
TOXIC SHOCK SYNDROME	5	
RABIES		
BECKHAM	SKUNK	1
CADDO	SKUNK	1
COMANCHE	SKUNK	1
CRAIG	SKUNK	3
GRADY	COW	1
GRADY	SKUNK	6
HARMON	SKUNK	1
KIOWA	COW	1
KIOWA	SKUNK	1
MUSKOGEE	SKUNK	1
WAGONER	SKUNK	1

OSMA council appointments announced

New members for the various councils of the Oklahoma State Medical Association have been appointed. As reported by James B. Eskridge III, MD, new OSMA president, in his President's Page last month (JOURNAL, June 1984), many of the new members were selected from among the state's younger physicians.

In accordance with the OSMA Constitution and Bylaws, the activities of the councils are governed by the association's Annual Program

of Activities as determined and interpreted by the Board of Trustees.

The Bylaws outline specifically the duties of each council.

The Council on Medical Education shall study and make recommendations related to all matters of maintaining or improving the level of medical competency in Oklahoma, including but not limited to maintaining liaison with other health professions and occupations, to the continuing medical education courses for association members, and to the accreditation of medical education programs in Oklahoma. It will also monitor continuing medical education standards as they may be required by association policy. Financial aid to education shall also be among the duties of this council.

The council members for 1984-85 are: William R. Smith, MD, Enid, Chairman; Victor L. Robards, MD, Tulsa, Vice-Chairman; John R. Alexander, MD, Tulsa; Robert C. Bowman, MD, Nowata; Robert T. Buchanan, MD, Oklahoma City; Robert W. King, Jr., MD, Oklahoma City; Steven Landgarten, MD, Tulsa; Thomas N. Lynn, Jr., MD, Oklahoma City; Harris J. Moreland, MD, Bartlesville; Tim K. Smalley, MD, Stillwater; Edgar W. Young, Jr., MD, El Reno; Charles B. McCall, MD, Oklahoma City, OUHSC; Edward J. Tomsovic, MD, Tulsa, TMB; and Larry D. Edwards, MD, Tulsa, ORUSM.

Members of the Health Manpower Physician Committee of this council are: Thomas N. Lynn, Jr., MD, Chairman; Charles B. McCall, MD; Edward J. Tomsovic, MD; Larry D. Edwards, MD; William R. Smith, MD; and Tim K. Smalley, MD.

The Council on Member Services will assume responsibility to plan and carry out ser-



Claude H. Williams, MD, right, of Okeene receives the 1984 A. H. Robins Physician Award for Community Service from Michael J. Haugh, MD, chairman of the OSMA Board of Trustees. In nominating Williams for the award at the OSMA Annual Meeting, Billy Dale Dotter, MD, noted his colleague's qualities as "husband, father, church and civic leader, and physician. He is an exemplary model of a practicing physician dedicated to his patients, his county, and his fellow physicians."

vices of all types having direct benefit to association members and constituent county or district medical societies of the association, including but not limited to insurance benefit programs, special publications, travel programs, services to the Auxiliary of the Oklahoma State Medical Association, student and house staff relations, speakers services, membership surveys, and personal services including counseling, membership recruitment, and adjudication of disputes.

The council members for 1984-85 are: William O. Coleman, MD, Oklahoma City, Chairman; Richard A. McKinne, MD, Muskogee, Vice-Chairman; Nolen L. Armstrong, MD, Oklahoma City; William G. Bernhardt, MD, Midwest City; Tim S. Caldwell, MD, Tulsa; Jack Dancer, MD, Shattuck; Edwin Fair, MD, Ponca City; Wilfred S. Gauthier, MD, Ardmore; Joe Ray Hamill, MD, Ardmore; Joe S. Hester, MD, Muskogee; George H. Jennings, MD, Oklahoma City; Edward A. McCune, MD, Enid; Robert A. McLaughlin, MD, Oklahoma City; Francis D. Oakes, MD, Oklahoma City; Paul O. Shackel-

ford, MD, Tulsa; and S. Fulton Tompkins, MD, Oklahoma City.

The Council on State Legislation shall review state legislation and regulation of concern to the medical profession or the public health, and shall initiate activities or undertake appropriate responses on matters of priority interest. It shall also establish and maintain relations with state government entities having statutory or regulatory jurisdiction affecting the medical profession, the delivery of health care, or the public health. In cooperation with other association councils and committees, it shall develop policy recommendations for consideration by the Board of Trustees, and it shall prepare testimony and otherwise conduct the state legislative program of the association.

The council members for 1984-85 are: William L. Hughes, MD, Oklahoma City, Chairman; Stephen E. Acker, MD, Oklahoma City, Vice-Chairman; M. Tom Buxton, MD, Oklahoma City; Hugh M. Conner, Jr., MD, Oklahoma City; Raymond L. Cornelison, Jr., MD,

(continued)



Jack Spears of Tulsa proudly displays the 1984 OSMA Outstanding Layman award he received at the OSMA Annual Meeting. Spears has served as executive director of the Tulsa County Medical Society since 1941, longer than any other medical society executive in the nation. He was commended for his lifetime of outstanding accomplishment in advancing the art and science of medicine. With Spears, from left to right, are past Tulsa County Medical Society presidents C. S. Lewis, Jr, MD; George H. Kamp, MD; Floyd Miller, MD; Victor L. Robards, Jr, MD; Robert G. Perryman, MD; Michael J. Haugh, MD; Norman L. Dunitz, MD, (current president); and John R. Alexander, MD.

Appointments *(continued)*

Midwest City; Billy D. Dotter, MD, Okeene; Robert S. Ellis, MD, Oklahoma City; Steve Jimerson, MD, Norman; William P. Jolly, MD, Lawton; John F. Josephson, MD, Tulsa; D. O. Kasprisin, MD, Tulsa; William J. Kruse, MD, Oklahoma City; Lee Newcomer, MD, Tulsa; Michael J. Schwartz, MD, Yukon; Charles R. Vest, MD, Ada; and Edgar W. Young, Jr., MD, El Reno.

Ex officio members are: Mrs Ellie Idstrom; Mrs Veronica Montero; Perry A. Lambird, MD; Larry L. Long, MD; Mark R. Johnson, MD; Joan K. Leavitt, MD; Charles B. McCall, MD; Walter H. Whitcomb, MD; and George F. Short, Esq, all of Oklahoma City.

The Council on Medical Services will study, make decisions, and formulate activities with respect to the provision of adequate medical care, including but not limited to the design or evaluation of all types of health care delivery systems, health planning, the financing of medical services and its impact on the quality of patient care, the social aspects of health, internal peer review mechanisms, and the appraisal of all external programs which affect the cost



C. Alton Brown, MD, left, of Oklahoma City, is presented the 1984 OSMA Distinguished Service Award by **Kenneth W. Whittington, MD**, Bethany, vice-chairman of the Board of Trustees. Brown was honored for his leadership in the establishment of the Physicians Liability Insurance Company (PLICO) and his dedicated service as chairman of the PLICO Board of Directors since the company's inception. The presentation was made at the OSMA Annual Meeting in May.

or quality of medical care.

The council members for 1984-85 are: John A. Blaschke, MD, Oklahoma City, Chairman; Ray V. McIntyre, MD, Kingfisher, Vice-Chairman; Ronald S. Barlow, MD, Oklahoma City; Donald L. Cooper, MD, Stillwater; G. Kevin Donovan, MD, Tulsa; Kurt Frantz, MD, Enid; Jay A. Gregory, MD, Muskogee; Bartis M. Kent, MD, Muskogee; Gretchen A. McCoy, MD, Oklahoma City; John R. Perkins, MD, Elk City; Ed E. Rice, MD, Oklahoma City; and David J. Shepherd, Jr., MD, Enid.

The Council on Governmental Activities shall review federal legislation and regulation of concern to the medical profession or the public health, and shall initiate activities or undertake appropriate responses on matters of priority interest. It shall also establish and maintain relations with federal government entities having statutory or regulatory jurisdiction affecting the medical profession, the delivery of health care, or the public health. In cooperation with other association councils and committees, it shall develop policy recommendations for consideration by the Board of Trustees, and it shall prepare testimony and otherwise conduct the federal legislative program of the association.

The council members for 1984-85 are: Perry A. Lambird, MD, Oklahoma City, Chairman; Richard Boatsman, MD, Lawton, Vice-Chairman; William D. Borkon, MD, Ada; Stephen K. Cagle, MD, Oklahoma City; Ed L. Calhoon, MD, Beaver; Charles D. Cook, MD, Poteau; Jerome M. Dilling, Jr., MD, Enid; Curtis E. Harris, MD, Oklahoma City; George H. Kamp, MD, Tulsa; George M. Pikler, MD, Tulsa; Garland Porterfield, MD, Oklahoma City; Christian N. Ramsey, Jr., MD, Oklahoma City; C. B. Rebsamen, MD, Tulsa; Ronald H. White, MD, Oklahoma City; and James A. Young, MD, Tulsa.

Ex officio members are: William L. Hughes, MD, Oklahoma City; Mrs Pam Oster, Ponca City; Mrs Ellie Idstrom, Oklahoma City; Mrs Veronica Montero, Oklahoma City; and John Montgomery, Washington, DC.

The Council on Public and Mental Health will represent the association in all matters related to public or mental health, including but not limited to maintaining effective liaison with public or private organizations engaged in activities of this type, and the sponsorship of programs for the betterment of public

(continued)



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Papper award goes to *Journal* winner, now MD

Thomas D. Tinker, MD, Oklahoma City, was the recipient this spring of the eighth annual Solomon Papper Humane Scholarship Award from the University of Oklahoma Health Sciences Center.

The award is named for the head of OU's Department of Medicine. It was developed by a national committee composed of Papper's former students and faculty colleagues.

In earning the award as a senior medical student, Tinker demonstrated humane concern for his patients and colleagues and excellence in scholarly endeavors.

One of Tinker's efforts, in collaboration

with his wife, Renee, also a medical student at the time, was a research project that measured the public's knowledge of nutrition. Their report on the project appeared in the September 1982 *JOURNAL* of the Oklahoma State Medical Association under the title "An Analysis of Nutritional Knowledge in the General Public." The report earned the *JOURNAL*'s Charlotte S. Leeboron Memorial Trust Award as the most outstanding scientific article published by the *JOURNAL* in 1982.

Both Thomas and Renee Tinker received their MD degrees from the University of Oklahoma last month. □

Appointments *(continued)*

or mental health, either singularly or in cooperation with public or private agencies having similar interests.

The council members for 1984-85 are: George W. Prothro, MD, Tulsa, Chairman; Jodie Edge, MD, Norman, Vice-Chairman; Frank L. Adelman, MD, Enid, Chairman Committee on Nutrition; Edgar M. Cleaver, MD, Tulsa; Gordon H. Deckert, MD, Oklahoma City; Sara R. DePersio, MD, Oklahoma City, Chairman, Maternal Mortality Committee; Hayden H. Donahue, MD, Norman; John W. Drake, MD, Oklahoma City; George B. Gathers, MD, Stillwater; William G. Harvey, MD, Beaver; Roger B. Hensley, MD, Oklahoma City; Jerry R. Hordinsky, MD, Oklahoma City; Joe B. Jarman, Jr., MD, Enid, Chairman, Sports Medicine Committee; Jerry Nida, MD, Oklahoma City; Bertha M. Levy, MD, Oklahoma City; Robert Mahaffey, MD, Tulsa; John S. Muchmore, MD,

Oklahoma City; Edward K. Norfleet, MD, Vinita; and Hal B. Vorse, MD, Oklahoma City, Chairman, Perinatal Task Force.

The Council on Professional and Public Relations shall plan and conduct all activities of the association with respect to public relations and public service projects, interprofessional and intraprofessional relations, all in cooperation with other councils and committees of the association.

Members of the council for 1984-85 are: M. Joe Crosthwait, MD, Midwest City, Chairman; Lanny Trotter, MD, Stillwater, Vice-Chairman; Howard A. Bennett, MD, Bartlesville; Warren V. Filley, MD, Oklahoma City; Burdge F. Green, MD, Stillwell; Edward W. Jenkins, MD, Tulsa; G. L. Massad, MD, Oklahoma City; Mary Ann McCaffree, MD, Oklahoma City; Jerry L. Puls, MD, Tulsa; L. E. Schoeffler, MD, Tulsa; and Michael Talley, MD, Okeene. □



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MDMA

Summer renews need for pesticides — and caution

Safety precautions when using pesticides are stressed in a new report by the American Council on Science and Health (ACSH). Few people take adequate precautions when using pesticides and household chemicals, it seems.

"One study showed that 90% of the people who had pesticides in their homes kept them in unlocked storage areas," says ACSH research associate Kathleen A. Meister. "Sixty-five percent kept them within easy reach of children. Fifty percent stored them near food or medicine. Clearly, there is room for improvement."

ACSH offers these eight safety tips:

1. Read the product label thoroughly *before* using any pesticide or other household chemical. Make sure that you understand the directions for use, precautionary statements, and first aid instructions. *Always* follow the label directions.

2. Store these products in a locked place, out of children's reach.

3. Don't leave any pesticide or household chemical unattended, especially if children are present.

4. Keep emergency phone numbers handy.

5. Don't mix chemicals with one another unless the instructions require it.

7. Wear rubber gloves when handling these products.

8. Store these products only in the manufacturer's container.

"Our report emphasizes accident prevention because accidents are the number one cause of pesticide-related health problems," says ACSH associate director Dr Richard A. Greenberg. "The safety record of pesticides has improved dramatically in the past 30 years, and it can continue to improve if consumers use these products carefully.

"Some people become alarmed if they hear that a pesticide is associated with an adverse health effect, and they wonder why that pesticide may still be on the market," Dr Greenberg continues. "These concerns reflect a misunderstanding of pesticide safety regulation. In large quantities, many pesticides can cause serious illness or even be fatal. This is to be expected; their purpose, after all, is to kill pests. They can be sold legally and used safely, however, because normal, correct use does not expose the user to dangerously large amounts." □

In Memoriam

1983

<i>John R. Reid, Jr, MD</i>	<i>June 14</i>
<i>Gilbert E. Haslam, Jr, MD</i>	<i>June 15</i>
<i>Thomas A. Trow, MD</i>	<i>June 23</i>
<i>Richard D. Mullett, MD</i>	<i>June 28</i>
<i>Aaron C. Little, MD</i>	<i>July 1</i>
<i>Michael C. Manning, MD</i>	<i>July 3</i>
<i>Hillard E. Denyer, MD</i>	<i>August 8</i>
<i>Edward A. Allgood, MD</i>	<i>August 18</i>
<i>Hugh E. Wilson III, MD</i>	<i>August 27</i>
<i>Harold J. Black, MD</i>	<i>September 1</i>
<i>Marque O. Nelson, MD</i>	<i>December 24</i>
<i>Park H. Medearis, MD</i>	<i>December 26</i>
<i>Charles S. Beaty, MD</i>	<i>December 28</i>

1984

<i>Jack H. Foertsch, MD</i>	<i>January 19</i>
<i>Thomas L. Ozment, MD</i>	<i>February 11</i>
<i>Thomas L. Foster, MD</i>	<i>February 25</i>
<i>Robert W. Lowrey, MD</i>	<i>February 27</i>
<i>Ella Mary George, MD</i>	<i>March 1</i>
<i>Kemper C. Lain, MD</i>	<i>March 8</i>
<i>William R. Cheatwood, MD</i>	<i>March 12</i>
<i>William A. Dean, MD</i>	<i>March 19</i>
<i>Charles H. Cooke, MD</i>	<i>March 23</i>
<i>Donald J. Worden, MD</i>	<i>April 1</i>
<i>William I. Jones, MD</i>	<i>April 3</i>
<i>Paul Kernek, MD</i>	<i>May 9</i>

Deaths

PAUL KERNEK, MD
1914 - 1984

Paul Kernek, MD, OSMA Life Member since 1981, died May 9 in Holdenville, where he had been an orthopedic surgeon for many years. Kernek was born in Holdenville and attended the University of Oklahoma College of Medicine, where he earned his medical degree in 1939. He was at one time the Hughes County medical examiner. Kernek practiced for several years in Orange County, California, in the early sixties before returning to his home state.

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Officers for 1984-85 chosen at OSMA's Annual Meeting

The Oklahoma State Medical Association (OSMA) installed its 1984-85 slate of officers at the 78th Annual Meeting, held in May at Shangri-La resort in eastern Oklahoma.

James B. Eskridge III, MD, Oklahoma City, was installed as the new president, succeeding George H. Kamp, MD, Tulsa. Kamp now becomes chairman of the OSMA's Council for Long Range Planning and Development.

Elvin M. Amen, MD, Bartlesville, a family physician, is the new president-elect.

Other officers elected were John R. Alexander, MD, Tulsa, vice-president; Raymond L. Cornelison, MD, Midwest City, secretary-treasurer; Larry L. Long, MD, Oklahoma City, speaker, House of Delegates; Robert G. Perryman, MD, Tulsa, vice-speaker, House of Delegates; Michael J. Haugh, MD, Tulsa, chairman, Board of Trustees; and Kenneth W. Whittington, MD, Bethany, vice-chairman, Board of Trustees. □

Life Memberships awarded by OSMA Board of Trustees

Life Memberships in the Oklahoma State Medical Association (OSMA) were recently approved for eleven Oklahoma physicians. Elected Life Members May 10 at the OSMA Annual Meeting were E. Stanley Berger, MD, John F. Kuhn, MD, Bertha M. Levy, MD, Wiley T. McCollum, MD, and W. W. Rucks, Jr, MD, Oklahoma City; J. C. Devine, MD, Tulsa; Philip Joseph, MD, Sapulpa; Thomas C. Points, MD, Crescent; Jack H. Reynolds, MD, Muskogee; Or-

ville M. Rippy, MD, Stillwater; and Robert L. Shore, MD, Lawton.

An OSMA member in good standing who meets one or more of the following qualifications is eligible for election to Life Membership: (1) Retired from the active practice of medicine due to ill health or age; (2) engaged in the active practice of medicine for 50 years or more; (3) attained the age of 70 years. □

Golf, tennis in full swing at busy Shangri-La meeting

The OSMA Annual Meeting wouldn't be complete without the golf and tennis competitions so popular with physicians and their spouses.

Winners in the golf tournament included Leon Combs, MD, Shawnee, and Lawrence Silvey, MD, Oklahoma City, in first and second place, respectively, for Low Gross.

Low Net winner was Graham Palmer, MD, Woodward, with James Tisdal, MD, Clinton, finishing second.

The Longest Drive Award went to A. C. Lisle, MD, Oklahoma City. Lawrence Silvey, MD, Oklahoma City, was Closest to the Pin.

In the tennis competition, David Harper, MD, Tulsa, took first place in the Men's Open Singles, and Stephen Cagle, MD, Oklahoma City, garnered second.

Men's Senior Singles winner was Farris Coggins, MD, Oklahoma City, and second place went to Stephen Tkach, MD, Oklahoma City.

Tkach, however, finished first in the Men's Doubles, with his partner John Drake, MD, Ok-

lahoma City. The second place team was David Harper, MD, and Raymond Zekauskas, MD, both of Tulsa.

The Women's Singles competition was won by Ruth Anna Cagle, Oklahoma City, followed by Rhoda Frankel, Evanston, Ill; Kathy Woodall, Oklahoma City; and Mary Frances Coggins, Oklahoma City. □

1985
OSMA ANNUAL MEETING
at
Sheraton Century Center
Oklahoma City
May 1 - 4

Annual Meeting



Above: Michael J. Haugh, MD, chairman of the OSMA Board of Trustees, addresses the Thursday morning board meeting. President George H. Kamp, MD, is on his right. Left: Past President John A. McIntyre, MD, Enid, studies his delegate handbook.



Delegates confer during a session of the OSMA House of Delegates.



Jerry Puls, MD, this year's annual meeting chairman, and Ed Kelsay, OSMA legal counsel, assemble part of "Rosie's Bar."



John "Klinger" Drake, MD, arrived in his best lace frock and won the "Best Costume" award. To the right, sporting a chic black kimono, is C. Alton Brown, MD, who shared the "Best Costume" honor with Drake.





*Billy Tubbs, head basketball coach at the University of Oklahoma, was guest speaker and crowd pleaser at the OU Medical School Alumni M*A*S*H Party.*



At the Governor's Breakfast Saturday morning, Governor George Nigh drives home a point with OSMa President-Elect Elvin M. Amen, MD, left; immediate Past President George H. Kamp, MD; and Executive Director David Bickham.

"General" David Bickham, accompanied by Steve Jimerson, MD, keeps an eye on the troops.



"Nutritional Facts and Fantasies, Mysteries and Myths" is the topic as Stephen R. Newmark, MD, Tulsa, speaks during the scientific program.





At the gala President's Dinner/
Dance, outgoing President
George H. Kamp, MD, right, greets
his successor James B. Eskridge
III, MD, of Oklahoma City.
Dr Eskridge's wife, Margaret,
(inset) dabs a tear as she watches.
Seated is special guest speaker
James "Doc" Blakely.

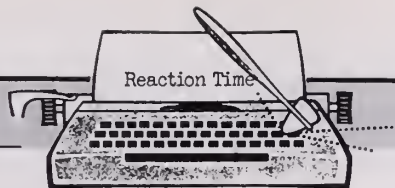


At the Closing Session of the
House of Delegates, Rod Frates,
left, president of C. L. Frates &
Company, presents a \$1 million
check from Lloyd's of London to
OSMA President Jim Eskridge.
The check reimburses OSMA for
funds used to start PLICO, the
Physicians Liability Insurance
Company. Seated behind them are
David Bickham and Speaker of the
House Larry Long, MD.



Company representa-
tives offering samples,
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filled the Exhibit Hall.





OSMA history buff speaks up

To the Editor:

In the May OSMA JOURNAL [President's Page] Dr Eskridge remarked that Dr LeRoy D. Long was the only man to be president of ITMA and OSMA. Dr Long was indeed president of both organizations, but records show that he was preceded in each case by Dr B.F. Fortner.

The Indian Territory Medical Association was the first such organization to be formed. A group of physicians met in Muskogee, IT, on 18-19 April, 1881, and organized the ITMA. The first president was Dr B.F. Fortner, of Claremore.

The activities of this organization subsided and on 29 June, 1889, a meeting was held, again in Muskogee, IT, and the ITMA was reorganized

with Dr B.F. Fortner again elected president.

On 9 May, 1893, a group of twenty-eight physicians met in Oklahoma City and organized the Oklahoma Territory Medical Association. The name was changed to the Oklahoma Medical Society by amendment to the constitution in 1902. This society was reorganized in 1904 and renamed the Oklahoma State Medical Association, well before statehood.

In 1906 the ITMA was amalgamated with the OSMA, retaining the name, Oklahoma State Medical Association. The first president of this new organization was Dr B.F. Fortner.

Dr LeRoy Long was elected secretary of the

(continued)

Exhibitors parade services and samples at Shangri-La

Automobiles, computers, pharmaceuticals, and encyclopedias were just a few of the many items on display in the exhibit hall at this year's OSMA Annual Meeting at Shangri-La. Over 40 exhibitors were present distributing information and samples to the physicians and guests in attendance. Exhibitors were:

Abbott Laboratories
Air Force Health Professions
Allied Nursing Care
American Medi-Lease
ATT Phone Center
Blue Cross and Blue Shield of Oklahoma
Bolen Imports, Inc.
Business Controls Corporation
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□

Book Reviews

Clinical Geropsychiatry (2nd edition). By Adrian Verwoerd, MD. Baltimore: Williams and Wilkins Company, 1981, Pp 353, indexed, \$37.00.

This book and its twenty-three chapters "covers it all." It does it unevenly, but then, a book this size cannot be all things to everyone. The book is eclectic, and it offers the psycho-biosocial aspects of the emotional problems of the aged, but it has a leaning towards the psychodynamic. It is still intriguing to see the "dirty old man" being called a "libidinal desperado" and an elderly father, full of hostility, awe, and envy towards his capable son, described as being "in a reverse Oedipal conflict."

As a person grows older, it is always a question whether illness will be the ultimate hoped-for dependency or that most distressing and tragic limitation it is for others. Seldom have I read a chapter that depicts so well the battle between the physician and the person suffering from self-serving hypochondriasis. The best part of the chapter, I believe, is the way the author shows how the clinician's ignorance can put him

in a "no win" situation, whereas if the clinician were to recognize the patient's need for the symptoms, he could develop a "no lose" approach.

The chapter on management of affective disorders addresses the most common psychiatric illness in the elderly — depression. It does a very good job as far as it goes, but research in depression keeps pouring out information at such a pace that the lag-time in publishing builds outdatedness into any chapter on depression. No mention is made of the now widely used dexamethasone suppression test (DST), which is helpful in verifying endogenous depression and even in distinguishing true dementia from the pseudodementia often seen with depression in the elderly. Furthermore, the use of thyroid or estrogen to potentiate antidepressants is not mentioned as one would expect in view of the recent vintage of such potentiators.

The chapter entitled "Schizophrenia and Senile Psychosis" has little to say about the schizophrenia brought to old age in its chronic form. However, it is a chapter rich in its description of the mental decompensations of the el-

Reaction Time *(continued)*

ITMA on 29 January, 1897. He had been active in presenting scientific papers at the meetings. He was elected president on 19 June, 1900, and again in 1934.

Dr Long was the first dean of the University of Oklahoma School of Medicine, serving from 1915 until 1931, when he resigned because of intolerable interference in the affairs of University Hospital by Governor Bill Murray.

— C.L. Oglesbee, MD
Muskogee, Oklahoma

References

1. The original minutes of the meetings of the ITMA.
2. "LeRoy Long, Teacher of Medicine," by Basal A. Hayes, MD, 1943.
3. "Medical Education in Oklahoma," by Mark R. Everett, University of Oklahoma Press, 1972.
4. "A History of Abdominal Surgery in Oklahoma," Mildred Oglesbee. One chapter of a proposed book on history of abdominal surgery in the US. Copies at University of Oklahoma Library, Muskogee General Hospital, and Muskogee *Phoenix* newspaper. The Association of Abdominal Surgeons had planned to have the book printed, but brought out an abridged paperback volume instead due to printing difficulties.

Dear Dr Oglesbee:

I was pleased to be corrected in such a gentlemanly way concerning my first (May, '84) President's Page . . . and a little chagrined that my "research" was so shallow that I missed such an important personage as Dr B. F. Fortner of Claremore!

Perhaps you, Dr Oglesbee, would enjoy serving on the Medical Heritage Committee of OSMA so that our history might be enriched by your knowledge. Your letter of appointment will follow soon.

Would it be safe to say . . . about Dr Fortner . . . that he was the ONLY ITMA president to have served two separate terms, later to have served OSMA as its FIRST president? Fait accompli!

Most humbly, and sincerely,
J. B. Eskridge III, MD
President

derly, from nocturnal confusion to senile regression. The author has an intriguing concept of communicating with dementia cases via primary process thinking. Thus, when a senile 78-year-old woman says to her doctor, "Your wife has died," she may really be saying, "I like you." Interestingly, such "understanding" flies into the common advice of redirecting reality at the person, eg, "No, Mrs Jones, I'm Dr X. My wife is fine, and I have come to see how you are."

A very significant contribution is the clinical advice on the management of chronic anxiety in the elderly. The author believes that the psychodynamics of anxiety neuroses are less important than they would be in a younger patient. He believes that in a lifetime of behavioral patterns based on neurotic anxiety, etiologically based insight therapy is not indicated. This is because the symptoms have become ingrained and will not respond well to counseling, guidance, and insight. They will, however, respond to drug therapy, increased levels of activity and involvement in interesting things, and relaxation techniques. For some elderly persons, old age is a crisis that never ends or, as Susan Son-tag put it: "... a crisis that never exhausts itself because the anxiety is never really used up. Aging for some is a movable doom." One can certainly then appreciate the need for vigorous management of chronic anxiety in the elderly.

The elderly frequently complain of incidents and happenings that are soon noted as delusions. The chapter "Thought Disorders and Paranoid Phenomena" is a tour de force on the subject. A chapter called "Environmental Planning" covers much that is needed for the elderly, both as to their physical and their people environment. As with child psychiatry, knowledge of available resources becomes an intrinsic part of geropsychiatry. But unlike child psychiatry, whose paths lead upward and outward, geropsychiatry leads towards a gentle and, it is hoped, dignified path to the grave. There is also a very elucidating chapter on "Protective Intervention" and taking away from the elderly the control of their lives. Sex in senescence is a disappointment — I mean the chapter: number 21. It is gloomy reading. "Senescex" is a journey through the shoals of life where, if not grounded on the sandbanks of involution, it will have been sunk by the rocks of chronic illness. Not only that, but it is just as well, it seems to say.

Missing from the book is more on widowhood, death, grieving, and helping those who must handle them. These topics are of major

existential significance, even as I disagree with whomever it was the author quoted as having said, "Old age is a depression."

*Fernando Tapia, MD
University of Oklahoma
Health Sciences Center
PO Box 26901
Oklahoma City, Oklahoma 73190*

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ANESTHESIOLOGIST, 35, BE, Fellow of ACA, 6 y practice in all types of anesthesia including regional and epidural blocks, interested in practice opportunity in state of Oklahoma preferably fee for service solo or small group practice, available on short notice. Please reply RR #7, Box 66, Ottumwa, Iowa 52501. 678

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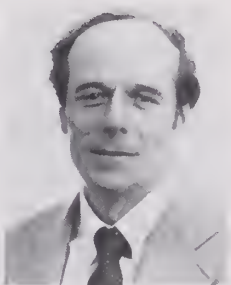
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OSMA 1984 Annual Meeting

REMARKS OF THE PRESIDENT to the OSMA House of Delegates

A major victory for the medical profession was achieved in Washington, DC, on April 12, when the US House of Representatives defeated by voice vote a proposal which would have made Medicare assignment mandatory. The cooperative efforts of many organizations were important in this successful effort, and the OSMA can certainly be proud of our members' role.



Our appeal to our membership for a voluntary freeze on fees, effective March 1, in conjunction with the action of the AMA and other groups, received very favorable consideration in Congress and in the media. Our association appears to be the only state medical association which has surveyed its membership in regard to their planned compliance with the voluntary fee freeze and their handling of indigent Medicare recipients. The very high positive response to both of these questions, 95% compliance with the fee freeze and 90% consideration for the indigent Medicare recipient status, was an excellent result. This also was very helpful in our discussions with the Oklahoma Congressional Delegation. In turn, this facilitated the efforts of Congressman Jones and the AMA staff in Washington. The AMA organized a "fly-in" of state medical association presidents on March 27 and 28 in Washington, and this organized opposition to the mandatory assignment legislation was quite effective.

Our own staff in Oklahoma City performed

remarkably in getting out the survey forms, and tabulating and disseminating the results in such a prompt and accurate manner. Most importantly, our entire physician membership should be proud of their actions in the successful struggle. This is by no means the final chapter in this story, and fundamental reform of Medicare must be dealt with in the future.

Two significant staff changes have occurred since our meeting in February. Mr Lyle Kelsey resigned to accept a position in a private business effective April 1. A search committee is screening several well-qualified applicants for this position, and it is anticipated that interviews will be conducted in the near future. Mr Kelsey was a valued staff member of our association for seven years, and we all wish him well in his future endeavors. The new executive director of the Oklahoma Foundation for Peer Review assumed his duties on April 1. Mr Neal Thrift brings a great deal of experience and good judgment to this very responsible position.

In conjunction with the OFPR, the operational contract by which OFPR purchases the use of the OSMA's computer system has been developed and signed. The contract appears to be a sound business document providing OSMA with a reasonable rate of return on its investment in the computer system. The computer's word processing capabilities have been very helpful in developing material for our OSMA annual meeting. This major capital expenditure, the largest single item we have purchased, represents a major step forward for our association.

(continued)

The Medicare Demonstration Project has finally been reduced to draft form by staff in Congressman Edwards' office in Washington. Following final review by Dr Lambird's council, it should be introduced into Congress in the near future.

The Board of Regents for Higher Education for the State of Oklahoma has authorized the study of physician manpower in Oklahoma, a project we have been working on with Chancellor Leone for some time. The appointment of this study group is proceeding with the regents requesting an individual to be appointed to represent seven institutions or organizations in the state. Dr Leone has asked me to represent the Oklahoma State Medical Association on this

study group, and I have accepted his invitation.

As this is my final report to the board and membership, I would like to express my sincere thanks to the numerous people who have helped me during the past year. Fellow physicians, members of the auxiliary, our council and committee chairmen, and all of our staff in Oklahoma City have been dedicated and helpful in the highest degree. David Bickham is truly an extraordinary person, and we are fortunate to have him as the most effective executive director of any state medical association. Finally, be assured that the transition to Dr Eskridge's leadership will be a smooth one. I have appreciated the opportunities and challenges of the past year.

Respectfully submitted,
George H. Kamp, MD

REMARKS OF THE PRESIDENT-ELECT to the OSMA House of Delegates

Mr Speaker, Delegates, and Honored Guests: My year as president-elect has centered around the councils and committees of OSMA. I have attended meetings of all councils except Government Activities, which always seemed to meet when other councils met, and most committees. My participation has been, and I hope will continue to be, mostly observational or, at times, advisory concerning association protocol.



The Physicians' Committee has ignited most of my interest, though the machinations of the State Legislation Council, during the session, have been most fascinating, albeit at times frustratingly unsuccessful.

New councils have been appointed, depending largely on those seasoned members with the addition of mainly younger physicians who have expressed interest in participating in this

or that council. Committees have been partially planned at this writing.

Needless to say, I have been impressed with the strong leadership role taken by our president, George Kamp, and have had ample opportunity to familiarize myself with the association happenings through his cooperation. He has been particularly effective as association spokesman, particularly in northeast Oklahoma; I look forward to his continued effective spokespersonship in that area as immediate past president of OSMA.

May I presume that your cooperation as loyal OSMA members will continue, enabling me to strive for the type of leadership to which we all have become accustomed!!

I will be pleased to try to arrange a visit, formal or informal, to your county society, when and if invited. Please contact me through the OSMA executive director, David Bickham.

— James B. Eskridge III, MD

Proceedings of the 78th Annual Session of the House of Delegates of the Oklahoma State Medical Association

OPENING SESSION

I. CALL TO ORDER AND OPENING REMARKS

The House of Delegates convened its 78th Annual Session at the Shangri-La Resort, Afton, Oklahoma, on May 10, 1984. Speaker Larry L. Long, MD, Oklahoma City, called the meeting to order at 12:40 PM.

II. INVOCATION

The invocation was delivered by James D. Funnell, MD, Oklahoma City.

III. SLIDE PRESENTATION

At this time a slide presentation was shown to the house, depicting scenes and facts on the state of Oklahoma, prepared by Carl R. Bogardus, Jr., MD.

IV. CREDENTIALS COMMITTEE REPORT

Leon D. Combs, MD, Shawnee, chairman of the Credentials Committee, announced that a quorum was present.

V. INTRODUCTIONS

Dr Long introduced those at the head table: Michael J. Haugh, MD, chairman of the Board of Trustees; David Bickham, OSMA executive director; George H. Kamp, MD, president; J. B. Eskridge III, MD, president-elect; Robert J. Perryman, MD, vice-speaker of the house and parliamentarian; and Ann McWatters and Susan Meeks, recording secretaries.

Dr Long introduced the following special guests: Bud Wright, American Medical Association Medical Societies Relations officer; Karl Stonecipher, MSII, University of Oklahoma Health Sciences Center; Mrs Camille Harrison, auxiliary president; Mrs Pam Oster, auxiliary president-elect; Mr Jack Spears, executive director, Tulsa County Medical Society; Mrs Dee Hampton, executive director, Oklahoma County Medical Society; and Mrs Laverne Dunlap, Oklahoma County Medical Society staff.

Dr Long introduced the following past presidents of the Oklahoma State Medical Association who were present: William M. Leebron, MD; C. S. Lewis, Jr., MD; John A. McIntyre, MD; James B. Pitts, Jr., MD; Floyd F. Miller, MD; Orange M. Welborn, MD; and Ed L. Calhoon, MD.

Dr Long then introduced Jerry L. Puls, MD, general chairman of the Annual Meeting Committee. Dr Puls recognized the hard work done for the meeting by the OSMA staff, and especially commended Ed Kelsay and Rick Ernest.

VI. APPROVAL OF THE MINUTES OF THE 1983 ANNUAL MEETING

It was moved that the house accept the minutes of the 1983 Annual Meeting. The motion was seconded and approved.

VII. AMA-ERF PRESENTATIONS

Mrs Camille Harrison, president of the auxiliary, along with Mrs. Sherry Strebel, presented the following checks to the three medical colleges in Oklahoma:

\$24,600.00 presented to William Knisely, PhD, for the University of Oklahoma College of Medicine, Oklahoma City;

\$1,865.00 presented to Edward J. Tomsovic, MD, Dean of the University of Oklahoma Tulsa Medical College;

\$875.01 presented to Lewis W. Thompson, MD, for Oral Roberts University in Tulsa.

The total amount given was \$27,340.01.

VIII. AUXILIARY REPORT

Dr Long recognized Mrs Camille Harrison, auxiliary president, who presented her report, which is included and made a part of the official minutes in the OSMA JOURNAL. She introduced Mrs Pam Oster, president-elect, who expressed her excitement about next year's challenges and accomplishments.

Mrs Harrison noted that because of an increase of 45 members, the auxiliary now has one more delegate to the AMA Auxiliary Convention in Chicago this year.

IX. PRESENTATION OF AWARDS

Michael J. Haugh, MD, chairman of the Board of Trustees, presented the A. H. Robins Award for Community Service to Claude H. Williams, MD, Okeene. Dr Williams expressed his thanks.

George H. Kamp, MD, president of OSMA, presented the Outstanding Layman Award to Mr Jack Spears, executive director of the Tulsa County Medical Society.

The following past presidents of the Tulsa County Medical Society were called forward to honor Mr Spears: Michael J. Haugh, MD; John R. Alexander, MD; Robert G. Perryman, MD; Victor L. Robards, Jr., MD; C. S. Lewis, Jr., MD; Floyd F. Miller, MD; Rollie E. Rhodes, Jr., MD; George H. Kamp, MD; and Norman L. Dunitz, MD, current president.

Proceedings *(continued)*

Mr Spears expressed his sincere appreciation.

William M. Leebron, MD, presented the Charlotte S. Leebron Memorial Trust Award for the best scientific paper published in the JOURNAL in 1983 — "Rabies in Oklahoma: Report of a Human Case," by Charles G. Helmick, MD; Andrew A. Vernon, MD; Stanley S. Schwartz, MD; Michael S. Ward, MD; and Mark A. Roberts, PhD.

Although the prize winners were unable to attend, each will receive an award of \$100.00.

The winners were selected by Mark R. Johnson, MD, JOURNAL editor-in-chief, and the Editorial Board.

X. ANNOUNCEMENTS

Dr Long stated that the business before the House of Delegates is conducted in accordance with Robert's Rules of Order.

Dr Long appointed the following committees to assist in the conduct of the meeting:

Parliamentarian

Robert G. Perryman, MD, Tulsa

Credentials Committee

Leon D. Combs, MD, Shawnee, chairman
Norman L. Dunitz, MD, Tulsa
Ray V. McIntyre, MD, Kingfisher

Tellers

John T. Bowman, MD, Tahlequah
Tom H. Shurley, MD, Altus
Phillip E. Washburn, MD, Sapulpa

Sergeants-at-Arms

Ed L. Calhoon, MD, Beaver
M. Joe Crosthwait, MD, Midwest City

Reference Committee I

Norman L. Dunitz, MD, Tulsa, chairman
Francis Hollingsworth, MD, El Reno
Victor J. Rogosa, MD, Alva
Robert J. Weedn, MD, Duncan
M. B. Shook, MD, Oklahoma City
Roger J. Reid, MD, Ardmore
Henry H. Modrak, MD, Tulsa
James S. Gerber, MD, Muskogee

Reference Committee II

Lanny F. Trotter, MD, Stillwater, chairman
Gary G. Evans, MD, Muskogee
Charles R. Gibson, MD, Chickasha
David M. Selby, MD, Enid
Mary Ann McCaffree, MD, Oklahoma City
Ralph W. Richter, MD, Tulsa
Harold A. Smith, MD, Claremore

Reference Committee III

William O. Coleman, MD, Oklahoma City, chairman
Stephen E. Trotter, MD, Shawnee
Rollie E. Rhodes, Jr., MD, Tulsa
Richard H. Bottomley, MD, Oklahoma City
John W. Drake, MD, Oklahoma City
Boyd O. Whitlock, MD, Tulsa

XI. COUNTY SOCIETY ACTION

The Rogers-Mayes County Medical Society requested that it be split into two separate societies. The OSMA Board of Trustees voted at the February 19, 1984, meeting to recommend to the House of Delegates that the original charter be revoked and that two new charters be issued.

Motion was made that the Rogers-Mayes County Medical Society Charter be revoked immediately and that two new chapters be issued in the following names: Rogers County Medical Society and Mayes County Medical Society. The motion was seconded and approved.

Rogers County Medical Society delegate is Orville U. Holt, MD, Claremore, and alternate delegate is Harold A. Smith, MD, Claremore.

Mayes County Medical Society delegate is Richard E. Martin, MD, Pryor.

XII. EARLY ANNOUNCEMENTS

Announcement was made that there is late information to be inserted in the handbook. Any additional information on late resolutions is available. Dr Long instructed all to wear their badges to any official functions.

Announcement was made that there will be a recess for delegate caucuses after the President's Report.

XIII. PRESIDENT'S REPORT

Dr Long introduced OSMA President Dr George Kamp, who presented a slide show describing highlights of his past year as president. Major points he discussed included:

- House Bill 1394, which would have mandated insurance payment for chelation therapy and other procedures, was the primary issue last May. The state senate and house passed this bill to the governor, but OSMA was able to persuade him to veto the bill. House Bill 1834, however, which dealt with allowing optometrists to prescribe drugs and medicine, was passed.

- A "Health Policy Forum" was held in February in Tulsa to review health policy issues.

- Our proposal for the Medicare Health Bonuses Option Program has been submitted and should be introduced in federal legislation form in the near future.

- The issue of HMOs and PPOs has surfaced this year. The state association is under legal restraints and can function simply in an informational role in this area.

- The peer review system has undergone changes with the advent of DRGs and the formation of peer review organizations. The Oklahoma Foundation for Peer Review was endorsed in a special session of the House of Delegates in November, 1983. In the last two weeks, the final proposal has been hand-carried to the HCFA offices in Baltimore. It is anticipated that the designation of the PRO for Oklahoma will be given to the OFPR.

- The largest single capital expenditure OSMA has ever made was to purchase a Data General computer system, which costs approximately \$250,000. The largest purchaser of time on the computer sys-

tem will be our peer review organization. Contracts have been signed that will protect the members' investment in this system, and it has been most useful in preparing documents for the annual meeting.

- A major step toward financial stability of this organization has been taken this year. In 1977, in order to assure ourselves of excess professional liability insurance above the \$100,000 level, a fund was formed jointly with Lloyd's of London. That money is now being returned to our association. This information is included in the Secretary-Treasurer's Report, along with the recommendations for the use of these funds, which approximate \$1.4 million.

- Another issue dealt with is the distribution and supply of physicians in Oklahoma. A panel has been appointed to study this complex issue. OSMA and six other medically related organizations will be represented in this study group.

- On February 19, 1984, the OSMA Executive Committee passed a resolution urging a voluntary fee freeze, which came several days before the AMA action. This resulted in much publicity. Only four other states have taken this action. OSMA is the only state association to survey its membership as to their intent to comply with the request for a voluntary fee freeze. The response from the survey was 90%-95% in favor of compliance. Congress later defeated the mandatory assignment issue.

Dr Kamp expressed his pride in being a physician.

XIV. RECESS

At 1:45 PM the house recessed for ten minutes to allow the county medical societies to caucus for trustee nominations. The house then reconvened at 1:55 PM.

XV. NOMINATIONS FOR ELECTIONS

Dr Long declared the house open for nominations for the position of **President-Elect** (one-year term of office).

Elvin M. Amen, MD, Bartlesville, was nominated by James R. Taylor, MD. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Vice-President** (one-year term of office).

John R. Alexander, MD, Tulsa, was nominated by Michael J. Haugh, MD. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

At this time, John R. Alexander, MD, asked to resign from his position as trustee from Tulsa County. A motion was made to accept his resignation. The motion was seconded and approved.

Nominations were declared open for the position of **Speaker, House of Delegates** (two-year term of office).

Larry L. Long, MD, Oklahoma City, was nominated by John A. Blaschke, MD. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Vice-Speaker, House of Delegates** (two-year term of office).

Robert G. Perryman, MD, Tulsa, was nominated by John R. Alexander, MD. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Delegate to the AMA (Position I)**.

M. Joe Crosthwait, MD, Midwest City, was nominated by Kent Braden, MD. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Delegate to the AMA (Position II)**.

Floyd F. Miller, MD, Tulsa, was nominated by Norman L. Dunitz, MD. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Delegate to the AMA (Position IV)**.

Perry A. Lambird, MD, Oklahoma City, was nominated by Roland A. Walters, MD. The nomination was seconded.

There being no other nominations, the nominations were declared closed.

At this time, Dr Long announced that in the interest of time, seconding speeches would not be required from this point on.

Nominations were declared open for the position of **Alternate to the AMA (Position I)**.

William M. Leebron, MD, Elk City, was nominated by J. B. Eskridge III, MD, on behalf of Milton J. Sugarman, MD.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Alternate to the AMA (Position II)**.

Orange M. Welborn, MD, Ada, was nominated by Clarence P. Taylor, Jr., MD.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Alternate to the AMA (Position IV)**.

John A. McIntyre, MD, Enid, was nominated by Joseph W. Stafford, MD.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Alternate Delegate (District I)**.

Larry G. Markel, MD, Bartlesville, was nominated by Carl H. Guild, MD.

Richard E. Martin, MD, Pryor, was nominated by Victor L. Robards, Jr., MD.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Trustee (District VI)**.

Thomas N. Lynn, Jr., MD, Oklahoma City, was nominated by Raymond L. Cornelison, Jr., MD.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Alternate Trustee (District VI)**.

Edwin E. Rice, MD, Oklahoma City, was nominated by James D. Funnell, MD.

Proceedings *(continued)*

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Trustee (District VIII)**.

Jerry L. Puls, MD, Tulsa, was nominated by Rollie E. Rhodes, Jr., MD, to complete the unexpired term of John R. Alexander, MD.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Alternate Trustee (District VIII)**.

Norman L. Dunitz, MD, Tulsa, was nominated by Rollie E. Rhodes, Jr., MD, to complete the unexpired term of Edward K. Norfleet, MD.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Trustee (District XI)**.

Thomas E. Rhea, MD, Idabel, was nominated by himself.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Alternate Trustee (District XI)**.

Robert E. Engles, MD, Durant, was nominated by Thomas E. Rhea, MD.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Trustee (District XII)**.

James V. Miller, MD, Ardmore, was nominated by Frank W. Clark, MD.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Alternate Trustee (District XII)**.

Clarence P. Taylor, Jr., MD, Ada, was nominated by Frank W. Clark, MD.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Trustee (District XIII)**.

William S. Harrison, MD, Chickasha, was nominated by John W. Flynn, MD.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Alternate Trustee (District XIII)**.

William A. Matthey, MD, Lawton, was nominated by John W. Flynn, MD.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Trustee (District XIV)**.

William Newland, MD, Altus, was nominated by Jeffrey S. Lester, MD.

There being no other nominations, the nominations were declared closed.

Nominations were declared open for the position of **Alternate Trustee (District XIV)**.

Jeffrey S. Lester, MD, Mangum, was nominated by himself.

There being no other nominations, the nominations were declared closed.

Nominations for the PLICO Board of Directors (three-year terms) were held at this time. The Board of Trustees heard nomination recommendations from the PLICO Board, approved them, and now forward them to the House of Delegates for consideration. The slate of nominees is as follows.:

C. Alton Brown, MD, Oklahoma City

C. S. Lewis, Jr., MD, Tulsa

John A. McIntyre, MD, Enid

Edward K. Norfleet, MD, Vinita

Kenneth W. Whittington, MD, Bethany

Billy Dale Dotter, MD, Okeene, advisory member

A motion to accept the above slate of nominees was made and seconded.

There being no other nominations, the nominations were declared closed.

At this time, Dr Long turned the meeting over to Robert G. Perryman, MD, vice-speaker of the House of Delegates.

XVI. REPORT OF THE CHAIRMAN OF THE BOARD OF TRUSTEES

Michael J. Haugh, MD, referred to his report in the handbook. He noted the board had its quarterly meeting earlier that morning, and the Supplemental Report would be available that afternoon. Four late resolutions were approved by the board to be brought to the house (Resolutions 16, 17, 18, and 19), of which Resolution 19 is a commendation for Edward K. Norfleet, MD, Vinita.

Dr Haugh noted there is a special item that was inadvertently omitted from the Board of Trustees Annual Report but is included in the Supplemental Report. Following the suggestion of the Council on Planning and Development, OSMA conducted a survey of compensation for presidents of state medical societies. The OSMA originally provided its president an honorarium of \$1,000 per year and later raised it to \$5,000. The board now recommends the honorarium be raised to \$12,000 per year. Dr Haugh noted that our president, during his term, probably spends over 100 days out of his office for the OSMA. Dr Haugh noted the board approved this recommendation with the stipulation that the amount be reviewed annually, and that the House of Delegates approve the increase.

XVII. REPORT OF THE SECRETARY-TREASURER

Raymond L. Cornelison, Jr., MD, referred the house to his report included in the handbooks and commented on the information. He recognized Ms Shirley Burnett, OSMA administrative assistant, for her excellent work and her assistance to him this past year.

Dr Cornelison noted that OSMA has dropped from \$5.1 million to \$4.6 million in assets. Most of the decrease reflects a PLICO loss. The association is in better financial shape than a year ago. Dr Cornelison referred to Report A of the Board of Trustees concerning Penn Square Bank. The bank's failure decreased OSMA's interest income by about \$40,000 last year, which also contributed to some of the loss.

Dr Cornelison then referred to Report B of the Board of Trustees concerning Lloyd's of London and other insurers. A special committee appointed by Dr

Kamp has made the following recommendations:

- (1) \$400,000 plus to restore the OSMA surplus and the Endowment Fund, and to be used to pay for the implementation of the Management Study recommendations;
- (2) \$500,000 be contributed to PLICO for assuming the Lloyd's of London risk and to bolster PLICO's capital;
- (3) \$500,000 be deposited to an OSMA Endowment, the interest of which will be used to fund special OSMA projects and against which will be issued a letter of credit to PLICO.

A motion was made to accept the report. The motion was seconded and carried.

XVIII. PRESENTATION OF BUSINESS TO COME BEFORE THE HOUSE

Dr Perryman announced that all information is in the handbooks. No other business will be considered at the closing session.

XIX. OTHER BUSINESS

Floyd F. Miller, MD, introduced Late Resolution 19, Commendation of Edward K. Norfleet, MD. Dr Miller read the resolution and Dr Norfleet received a standing ovation.

XX. NECROLOGY REPORT

Dr Perryman read the Necrology Report, after which a moment of silence was observed. (A copy of the report is attached and made a part of these minutes.)

1983-84 Necrology Report

Edward A. Allgood, MD
Charles S. Beaty, MD
Harold J. Black MD
William R. Cheatwood, MD
Charles H. Cooke, MD
William A. Dean, MD
Hillard E. Denyer, MD
Jack H. Foertsch, MD
Thomas L. Foster, MD
Ella Mary George, MD
Gilbert E. Haslam, Jr., MD
William I. Jones, MD
Kemper C. Lain, MD
Aaron C. Little, MD
Robert W. Lowrey, MD
Michael C. Manning, MD
Park H. Medearis, MD
Richard D. Mullett, MD
Marque O. Nelson, MD
Thomas L. Ozment, MD
John R. Reid, Jr., MD
Thomas A. Trow, MD
Hugh E. Wilson III, MD
Donald J. Worden, MD

XXI. ADJOURNMENT

The Opening Session of the House of Delegates was adjourned at 2:50 PM.

Recorded by Ann McWatters and Susan Meeks

CLOSING SESSION

I. CALL TO ORDER AND INTRODUCTIONS

The Closing Session of the 78th Annual Meeting of the House of Delegates was called to order by Speaker Larry L. Long, MD, Oklahoma City, at 12:40 PM in Salon A of the Shangri-La Conference Center, Afton, Oklahoma.

Dr Long introduced several guests who were in attendance, J. B. Wallace, MD, Ada, president and medical director of the Oklahoma Foundation for Peer Review; and Mr Neal Thrift, executive director of the Oklahoma Foundation for Peer Review.

Dr Long then read a letter from Karl Stonecipher, MSII, University of Oklahoma Health Sciences Center, who had attended the initial part of the Annual Meeting. Mr Stonecipher thanked the house for an interesting and educating look at the other side of medicine. He also thanked the OSMA for the aids and benefits given to the medical students and expressed his enthusiasm in working towards a better future.

II. REPORT OF THE CREDENTIALS COMMITTEE

Credentials Committee Chairman Leon D. Combs, MD, Shawnee, announced that a quorum of delegates was present.

III. INVOCATION

The invocation was delivered by Mrs Camille Harrison, outgoing president of the OSMA Auxiliary.

IV. AUXILIARY GUEST SPEAKER

Mrs Harrison then introduced her guests, Mrs Kay Reardon, president of the Southern Medical Association Auxiliary and Mrs Glenda Bates, president of the AMA Auxiliary.

Mrs Bates came forward to address the House of Delegates, and expressed her thanks for the genuine concern, appreciation, and support the OSMA has given to the auxiliary. She stressed the importance of teamwork between the medical association and the auxiliary, and the ability to guide and direct constant changes of our own making.

Mrs Bates explained that the number one goal of the AMA Auxiliary is to become a public relations arm to work in areas of community service in order to enhance the image of the physician and medicine as a whole. Mrs Bates noted that these have been trying times for the medical profession. She stated that being united in common goals can accomplish great things, and that auxiliary members will continue to serve as the proud partners of the medical profession.

V. PRESENTATIONS

Dr Long introduced Kenneth W. Whittington, MD, Bethany, to present the Distinguished Service Award to C. Alton Brown, MD, president and chairman of the board of the Physicians Liability Insurance Company. Dr Whittington stressed the amount of time Dr Brown has spent in working with PLICO since its inception and personally thanked him for his efforts. Dr Brown expressed his thanks and noted it is a great pleasure for him to serve in the capacity of president of PLICO.

Mr Rod Frates, president of C. L. Frates & Company, handed to James B. Eskridge III, MD, incoming OSMA president, a check symbolizing the 1½ million dollars from Lloyd's of London Insurance Company for the returned portion of funds in an excess limits liability insurance plan. Dr Eskridge accepted the check on behalf of the association and expressed his thanks to the group.

VI. REMARKS OF THE PRESIDENT-ELECT

Dr Eskridge noted that his official presentation was included in the delegates' handbooks, and expressed the importance of continuing to provide quality medical care to patients.

VII. ANNUAL PLICO SHAREHOLDERS MEETING

Dr C. Alton Brown, MD, Oklahoma City, president and chairman of the PLICO Board of Directors, presented his report at this time. (A copy of the PLICO report is made a part of the official minutes in the OSMA JOURNAL.)

It was then moved that Dr Brown's report be approved. The motion was seconded and carried.

VIII. ELECTIONS

Dr Long appointed John A. McIntyre, MD, Enid, as teller to assist John T. Bowman, MD, Tahlequah, and Tom H. Shurley, MD, Altus, tellers.

Dr Long explained that there is one contested position, that of Board of Trustees District I Alternate Trustee. Drs Larry G. Markel of Bartlesville and Richard E. Martin of Pryor have been nominated. Ballots were distributed for the vote. Dr Long noted that once the tellers have tallied the vote, the winner would be announced.

Dr Long then reviewed the following nominations for election:

- Elvin M. Amen, MD, Bartlesville — President-Elect
- John R. Alexander, MD, Tulsa — Vice-President
- Larry L. Long, MD, Oklahoma City — Speaker, House of Delegates
- Robert G. Perryman, MD, Tulsa — Vice-Speaker, House of Delegates
- M. Joe Crosthwait, MD, Midwest City — AMA Delegate (Position I)
- Floyd F. Miller, MD, Tulsa — AMA Delegate (Position II)
- Perry A. Lambird, MD, Oklahoma City — AMA Delegate (Position IV)
- William M. Leebron, Elk City — AMA Alternate

Delegate (Position I)

Orange M. Welborn, MD, Ada — AMA Alternate Delegate (Position II)

John A. McIntyre, MD, Enid — AMA Alternate Delegate (Position IV)

Trustee District VIII: Tulsa County

Trustee: Jerry L. Puls, MD, Tulsa

Alternate: Norman L. Dunitz, MD, Tulsa

Trustee District XI: Atoka, Bryan, Choctaw, Coal, McCurtain, and Pushmataha counties

Trustee: Thomas E. Rhea, MD, Idabel

Alternate: Robert E. Engles, MD, Durant

Trustee District XII: Carter, Garvin, Johnston, Love, Marshall, Murray, and Pontotoc counties

Trustee: James V. Miller, MD, Ardmore

Alternate: Clarence P. Taylor, Jr., MD, Ada

Trustee District XIII: Caddo, Comanche, Cotton, Tillman, Grady, Jefferson, and Stephens counties

Trustee: William S. Harrison, MD, Chickasha

Alternate: William A. Matthey, MD, Lawton

Trustee District XIV: Greer, Harmon, Jackson, Kiowa, and Washita counties

Trustee: William Newland, MD, Altus

Alternate: Jeffry S. Lester, MD, Mangum

PLICO Board of Directors:

C. Alton Brown, MD, Oklahoma City

C. S. "Burr" Lewis, Jr., MD, Tulsa

Edward K. Norfleet, MD, Vinita

John A. McIntyre, MD, Enid

Kenneth W. Whittington, MD, Bethany

Billy Dale Dotter, MD, Okeene, Advisory Board Member

Dr Long later announced that Dr Richard E. Martin, MD, Pryor, was elected by vote as Alternate Trustee of District I, and declared the slate of nominees (as noted above) duly elected.

IX. REFERENCE COMMITTEE REPORTS

Dr Long stated the reference committee reports would be governed by Robert's Rules of Order. A delegate can speak once for or against a question. Variation from that will be at the chair's discretion. He asked that each delegate state his name and county medical society when speaking before the house. Dr Long stated that a recommendation by a reference committee is automatically introduced as a motion and does not require a second.

The reference committee reports considered by the house are attached and made a part of the official minutes included in this issue of the OSMA JOURNAL.

Report of Reference Committee I

Presented by Norman L. Dunitz, MD, Tulsa

Reference Committee I approved the following items without amendment:

Item 1. Report of the Board of Trustees

The Reference Committee commended the board on its diligence and especially commended Michael J. Haugh, MD, chairman, and Kenneth W. Whittington, MD, vice-chairman.

Item 2. Supplemental Report of the Board of Trustees

It was noted that approval of this report includes endorsement of the president's honorarium to be raised from \$5,000 to \$12,000 per year.

Item 3. Board of Trustees Report A — Penn Square Bank

Item 4. Board of Trustees Report B — Lloyd's of London and Other Insurers

Item 5. Report of the Secretary-Treasurer

The reference committee expressed its sincere appreciation to Raymond L. Cornelison, Jr., MD, for his concern and his diligence in regard to the financial situation of the OMSA.

Item 6. Membership Report

Item 7. Report of the Council on Long-Range Planning and Development

The reference committee commended John A. McIntyre, MD, chairman, for his exceptional leadership of this council.

Item 8. Report of the Constitution and Bylaws Committee

The reference committee noted that by adoption of the report the delegates would reject bylaw changes that would permit affiliate membership for medically allied professionals who are not medical doctors, and would accept the recommendation for creation of the Council on Hospital Medical Staffs.

Item 9. Report of the Physicians Liability Insurance Company

The reference committee commended the PLICO Board of Directors for its excellent job in 1983-84.

Item 10. Special Report of the Auxiliary

The reference committee commended the auxiliary as a whole for its accomplishments in 1983-84.

Item 11. Report of the OSMA Auxiliary

The reference committee especially commended Mrs Camille Harrison, auxiliary president, for her exceptional leadership and dedication.

Item 13. Resolution 5 — Late Resolutions

Item 15. Resolution 13 — OSMA Auxiliary

Reference Committee I approved the following items as amended:

Item 12. Resolution 2 — Outpatient Psychiatric Coverage

The reference committee recommended the following Substitute Resolution be adopted in lieu of Resolution 2:

Resolved, That the House Delegates hereby requests the Board of Directors of PLICO to study its PLICO Health policy in regard to possible outpatient psychiatric coverage.

There was considerable discussion on this resolution.

The question was called for, and the house approved the motion to adopt the substitute resolution.

Item 14. Resolutions 10 and 11 — Extended Fee Freeze

The reference committee recommended that these resolutions not be adopted. After some discussion, it was moved, seconded, and approved that the two resolutions be separated.

The House moved to amend Resolution 10, as noted below. The motion was seconded and carried.

Page 1, Line 18, insert *may* between *Association* and *immediately* so as to read . . . *the Oklahoma State Medical Association may immediately rescind.* . . .

After some discussion from the floor, it was moved, seconded, and carried that Resolution 11 be withdrawn.

Item 16. Resolution 14 — Expanding PLICO into the Area of Contract Medicine

The reference committee recommended that Resolution 14 be rejected, and the following Substitute Resolution be adopted in lieu of Resolution 14:

Resolved, That the Oklahoma State Medical Association, through its House of Delegates, urges the Physicians Liability Insurance Company (PLICO) to study the feasibility of a competitive health insurance program that could be marketed in contractual relationships with hospitals and physicians in the State of Oklahoma, and with the same degree of trust and harmony that exists between PLICO and the said physicians of the Oklahoma State Medical Association.

It was moved to adopt the Report of Reference Committee I as a whole. The motion was seconded and carried.

Report of Reference Committee II

Presented by Lanny F. Trotter, MD, Stillwater

Reference Committee II approved the following items without amendment:

Item 1. Report of the Council on Professional and Public Relations

The reference committee commended the council on effectively carrying out those duties assigned in 1983-84.

Item 2. Report of the President

The reference committee expressed its appreciation and deepest gratitude for the excellent leadership provided by George H. Kamp, MD, throughout the past year.

Item 3. Report of the President-Elect

Item 5. Report of the Council on Medical Education

The reference committee expressed its appreciation for the exceptional manner in which the council conducted its activities last year.

Item 6. Report of the JOURNAL of the Oklahoma State Medical Association

The reference committee commended the JOURNAL and its editorial staff.

Item 7. Resolution 1 — Viet Nam Veterans

Item 8. Resolution 6 — Cognitive Services Reimbursement

The reference committee reported that extensive testimony was heard and strongly recommended that Resolution 6 be adopted.

Reference Committee II approved the following items as amended:

Item 4. Report of the Council on Public and Mental Health

The reference committee expressed its appreciation to the council for a job well done and recommended that the report be adopted with the following changes:

Page 2, Line 5, Section B, after the title *Maternal Mortality Committee*, delete lines 5 through 7 and insert *The annual report is attached for your information.*

Page 2, Line 18, after the word *report*, delete the remaining portion of that paragraph through line 22 and insert the following:

The task force deserves special commendation for its efforts in developing a comprehensive plan for perinatal care.

The reference committee recommended that the Oklahoma State Medical Association support Governor Nigh's plan to create by executive proclamation an advisory committee on perinatal care in Oklahoma and that the advisory committee work with the Oklahoma State Department of Health, the OMSA, and the private sector in developing a financing and implementation plan for perinatal care in the state.

Item 9. Resolution 8 — Excess Supply of Physicians

After some discussion, members of the house proposed the following amendments to this resolution:

Page 2, Lines 25 and 26, insert a period after the word *level* and delete line 26 entirely, so the sentence, beginning at line 24, would read *New entrants to US allopathic and osteopathic schools should be reduced from the present level.* The reason for this amendment is so the resolution will not affect the Physician Manpower Study by the Regents for Higher Education.

Page 3, Lines 3 and 4, insert the word *ethnic* between *each* and *minority* and insert *regardless of gender* after the period following *population*. The sentence, beginning with line 1 would thus read *Minority enrollment in US medical schools should be increased in proportion to the expected future representation of each ethnic minority group in the general population regardless of gender.*

The House then moved, seconded and approved Res-

olution 8 as amended.

Item 10. Resolution 15 — Support for Prudent Negotiations of Practice Contracts

The reference committee recommends that Resolution 15 be adopted with the following change:

Page 2, Line 2, delete the word *beneficial* and insert the word *appropriate*, so as to read, beginning at line 1, *WHEREAS, Physicians find themselves uncertain as to the most appropriate course to follow and the most appropriate type of contract to sign;*

Item 11. Resolution 16 — Hazards of Smoking

The reference committee, per the request of the author, recommended that the percentages on Line 7 be changed from "35-40%" to "30-35%."

The reference committee also recommended the first resolve be amended to read as follows:

Resolved, That the Oklahoma State Medical Association House of Delegates hereby encourages all physicians to schedule extra time to explain the extreme health hazards of smoking to their cigarette smoking patients; and be it further

Item 12. Resolution 18 — Smokeless Tobacco (Snuff and Chewing Tobacco)

The reference committee recommended changing the wording to add two resolves but not change the intent of the resolution, as follows:

Page 2, Line 4, after the word *cigarettes*, change the punctuation to a semicolon (;) and after *and*, add *be it further*. Make the remaining portion of the sentence a third resolve. This section, beginning at line 2, would thus read:

Resolved, That the OSMA request that the Surgeon General require a health hazard warning on smokeless tobacco similar to the warning currently on cigarettes; and be it further

Resolved, That Oklahoma physicians make every effort to discourage the use of smokeless tobacco; and be it further

The reference committee also recommended that a fourth resolve be added, as follows:

Resolved, That this resolution be submitted to the House of Delegates of the American Medical Association

Item 13. Resolution 19 — Commendation of Edward K. Norfleet, MD

Following house approval of this resolution, Dr Long suspended the parliamentary rules to allow amendments to this resolution, as follows:

After Line 10, insert two *whereas* statements:

WHEREAS, Edward Norfleet has had an open and continuing love affair with medicine for over 32 years; and

WHEREAS, His heart and soul are always in tune with the needs and best interests of medicine;

After the first *RESOLVED*, delete the period at the end of the sentence and add:

; and be it further

Resolved, That Ed Norfleet be commended for his love, loyalty, devotion and dedication to

medicine and that he always be known as a friend to OSMA and medicine.

The house moved, seconded, and approved Resolution 19 with the amendments as noted above.

It was moved and seconded that the house adopt the Report of Reference Committee II as a whole. The motion carried.

— Dr Long turned the meeting over to Robert G. Perryman, MD, vice-speaker. —

Report of Reference Committee III

Presented by William O. Coleman, MD, Oklahoma City

Reference Committee III approved the following items without amendment:

Item 1. Report of the Council on Governmental Activities

The reference committee commended Perry A. Lambird, MD, chairman, members of the council, and Congressman Mickey Edwards for their diligent efforts. Special appreciation was expressed to Dr George Kamp for the many hours spent away from his practice dealing with Congress during this most trying year.

Item 2. Report of the Council on State Legislation

The reference committee gave strong commendation to William L. Hughes, MD, chairman and to the council members for all their efforts in carrying out the association's legislative activities.

Item 3. Council on State Legislation Report A — Lay Council

The reference committee agreed with the need for OSMA to have a lay council comprised of state community leaders to become informed on the issues affecting medical care in Oklahoma.

Item 4. Report of the Council on Medical Services

The reference committee commended John A. Blaschke, MD, chairman, for his excellent leadership of this council.

Item 5. Report of the Council on Member Services

The reference committee commended the council and the staff assigned to this council for their long hours of work.

Item 6. Report of the Oklahoma Medical Political Action Committee

Item 7. Report of the Physicians Committee

This report calls for structural changes within the committee and the authorization for expenditures to support an aggressive intervention program, with which the reference committee is in agreement.

Item 8. Resolution 3 — Voluntary Fee Freeze

Item 10. Resolution 10 — County Health Department Millage

Reference Committee III approved the following items as amended:

Item 9. Resolutions 4 and 7 — Federally Financed Health Care Programs and Hospital Fee Freeze

The reference committee recommended combining the two resolutions in the form of the following Substitute Resolution:

Resolved, That all entities involved in the delivery of health care display the same sensitivity to economic factors facing patients and respond by stabilizing their charges for one year as initiated by Oklahoma physicians.

Item 12. Resolution 17 — Medicare Attestation

Since the AMA has already initiated an aggressive campaign to modify, amend, or rescind the Medicare Attestation, it is recommended that the resolution not be forwarded to the AMA. The reference committee thus recommended that the final resolve of Resolution 17 be deleted.

Reference Committee III rejected the following item:

Item 11. Resolution 12 — Prospective Payment System

While the reference committee was in agreement, and sympathetic to the thrust of this resolution, it was felt that the negative impact would outweigh the benefit, and therefore recommends that Resolution 12 not be adopted.

It was moved that the House adopt the Report of Reference Committee III as a whole. The motion was seconded and carried.

Dr Perryman expressed thanks to all the members of the reference committees for their time and effort spent.

X. OMPAC REPORT

William M. Leebron, MD, chairman, noted the yearly OMPAC report is in the handbooks and has been approved by the house.

XI. OTHER BUSINESS

None was presented at this time.

XII. ANNOUNCEMENTS

Dr Perryman noted that food and drink are available at the Hogan for those who would like some refreshments before leaving Shangri-La. Dr Perryman also expressed appreciation to everyone for a successful annual meeting.

XIII. ADJOURNMENT

It was moved that the Closing Session of the 78th Meeting of the House of Delegates adjourn. The motion was seconded and approved. The House of Delegates adjourned at 2:30 PM.

Recorded by Toni K. Leverett

Report of REFERENCE COMMITTEE I

Presented by: Norman L. Dunitz, MD, Chairman

Mr Speaker and Members of the House of Delegates:

Reference Committee I gave careful consideration to the several items referred to it and submits the following report:

(1) Report of the Board of Trustees

Recommendation:

Mr Speaker, your Reference Committee considered the Report of the Board of Trustees and would like to commend the trustees on their diligence, and especially commend Michael J. Haugh, MD, Chairman, and Kenneth W. Whittington, MD, Vice-Chairman. The Reference Committee recommends that the Report of the Board of Trustees be filed, as it is an informational item.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(2) Supplemental Report of the Board of Trustees

Recommendation:

Mr Speaker, your Reference Committee has carefully reviewed this report and recommends that the Supplemental Report of the Board of Trustees be approved.

The Committee would call to your attention that within the report the board requests that the House take special note of the recommendation that the President's honorarium be raised from \$5,000 to \$12,000 per year. Your Reference Committee wishes to stress that, although there are many members (ie, council and committee chairmen) that spend much time in service to the association, it should be noted that the President's workload has increased significantly over the years requiring as much as 100 days per year and frequently demands unscheduled activities.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(3) Board of Trustees Report A — Penn Square Bank

Recommendation:

Mr Speaker, your Reference Committee recommends that Report A of the Board of Trustees be filed, as it is an informational item.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(4) Board of Trustees Report B — Lloyd's of London and Other Insurers

Recommendation:

Mr Speaker, your Reference Committee recommends that Report B of the Board of Trustees be adopted. This report discusses in some detail the dis-

tribution of funds recovered from an insurance agreement with Lloyd's of London and others.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(5) Report of the Secretary-Treasurer

Recommendation:

Mr Speaker, your Reference Committee recommends that the Report of the Secretary-Treasurer be adopted. The committee would also like to express its sincere appreciation to Raymond L. Cornelison, Jr., MD, for his concern and his diligence in regard to the financial situation of the OSMA.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(6) Membership Report

Recommendation:

Mr Speaker, your Reference Committee recommends that the Membership Report be filed, as it is an informational item.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(7) Report of the Council on Long-Range Planning and Development

Recommendation:

Mr Speaker, your Reference Committee recommends that the Report of the Council on Long-Range Planning and Development be filed, as it is an informational item. The committee also commends John A. McIntyre, MD, Chairman, for his exceptional leadership of this council.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(8) Report of the Constitution and Bylaws Committee

Recommendation:

Mr Speaker, your Reference Committee recommends that the Report of the Constitution and Bylaws Committee be adopted as a whole. Your Reference Committee would like to make certain that the delegates understand that by adoption of the report they are rejecting bylaw changes that would permit affiliate membership for qualified dentists, qualified pharmacists, and other medically allied professionals who are not medical doctors.

In addition, this report recommends the creation of the Council on Hospital Medical Staffs.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(9) Report of the Physicians Liability Insurance Company

Recommendation:

Mr Speaker, your Reference Committee recommends that the Report of the Physicians Liability Insurance Company be filed for informational purposes. The committee would also like to commend the PLICO Board of Directors for the excellent job it has done in responsibilities concerning the insurance company.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(10) Special Report of the Auxiliary

Recommendation:

Mr Speaker, your Reference Committee fully agrees with this excellent report outlining the history of the OSMA Auxiliary, and would like to commend the Auxiliary as a whole for its great accomplishments in 1983-84. Your Reference Committee recommends that the Special Report of the Auxiliary be filed for informational purposes.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(11) Report of the OSMA Auxiliary

Recommendation:

Mr Speaker, your Reference Committee would like to especially commend Mrs Camille Harrison, Auxiliary president, for her exceptional leadership and dedication, and recommends that the Report of the OSMA Auxiliary be filed, as it is an informational item.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(12) Resolution 2 — Outpatient Psychiatric Coverage

Recommendation:

Mr Speaker, your Reference Committee heard considerable testimony for and against this resolution. The committee appreciates the concern of psychiatrists regarding this particular coverage. Your Reference Committee recommends that Resolution 2 be rejected, and that the following Substitute Resolution be adopted in lieu of Resolution 2:

RESOLVED, That the House of Delegates hereby requests the Board of Directors of PLICO to study its PLICO Health policy in regard to possible outpatient psychiatric coverage.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(13) Resolution 5 — Late Resolutions

Recommendation:

Mr Speaker, your Reference Committee would like to commend the Oklahoma Delegation to the AMA for its diligence in representing Oklahoma physicians at the national level. The Committee recommends that Resolution 5 be adopted.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(14) Resolutions 10 and 11 — Extended Fee Freeze

Recommendation:

Mr Speaker, your Reference Committee heard no testimony concerning these resolutions. After a careful review of both resolutions, the committee recommends that Resolutions 10 and 11 not be adopted.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(15) Resolution 13 — OSMA Auxiliary

Recommendation:

Mr Speaker, your Reference Committee again would like to express special appreciation for the OSMA Auxiliary and recommends that Resolution 13 be adopted.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(16) Resolution 14 — Expanding PLICO into the Area of Contract Medicine

Recommendation:

Mr Speaker, your Reference Committee heard considerable testimony for both sides of this issue, and recommends that Resolution 14 be rejected, and that the following Substitute Resolution be adopted in lieu of Resolution 14:

Resolved, That the Oklahoma State Medical Association, through its House of Delegates, urges the Physicians Liability Insurance Company (PLICO) to study the feasibility of a competitive health insured program that could be marketed in contractual relations with hospitals and physicians in the State of Oklahoma, and with the same degree of trust and harmony that exists between PLICO and the said physicians of the Oklahoma State Medical Association.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

Mr Speaker, Reference Committee I recommends adoption of this report as a whole.

Mr Speaker, this concludes the Report of Reference Committee I. Your Reference Committee wishes to thank all who participated in the hearing and contributed to the preparation of this report.

Respectfully submitted,
Norman L. Dunitz, MD, Chairman
Francis Hollingsworth, MD
Victor J. Rogosa, MD
Robert J. Weedn, MD
M. Boyd Shook, MD
Roger J. Reid, MD
Henry H. Modrak, MD
James S. Gerber, MD
Mike Sulzycki, Staff
Toni Leverett, Staff

Report of the BOARD OF TRUSTEES

Reference Committee I

Subject: Annual Report
Presented by: Michael J. Haugh, MD, Chairman
Referred to: Reference Committee I

Introduction:

The Board of Trustees of the OSMA has completed three of its quarterly meetings for organizational year 1983-84. The fourth, or annual meeting, of the board is being held in conjunction with this annual meeting of the association. The proceedings of the annual board meeting are contained in the Supplemental Report of the Board of Trustees.

During the past year the board met on August 14 and November 13, 1983, and February 19, 1984. A quorum was certified for each meeting with an average of 8 officers, 15 trustees or alternate trustees, and 9 AMA delegates or alternate delegates present.

Management Study

During 1983-84 a management study of the association's activities was conducted by the consulting firm of Deloitte, Haskins & Sells. The firm was the low bidder on a request for proposal sent out by the OSMA.

During the November meeting the board approved the portion of the management study report recommending the association purchase appropriate computer equipment to reduce its membership files and dues accounting to an electronic data processing mode. In addition, the equipment could be used for word processing by the association's staff.

The proposal called for the equipment to be paid out over a period of up to 2½ years, with maintenance expenses being an additional cost.

The board authorized the Executive Committee of the association to make the final decision concerning the computer.

At the recommendation of Deloitte, Haskins & Sells the association did purchase a Data General computer that was installed during the month of March and brought up to operational status during April.

Medicare Demonstration Project

During its August meeting the board authorized the association to proceed with implementing the special Medicare demonstration project that was an outgrowth of the PLICO Health stay-well bonus system. The idea was taken to the Oklahoma Congressional Delegation, where it met with some amount of enthusiasm.

At the recommendation of OSMA's Washington representative, John Montgomery, the idea was presented to several different congressional committee staff people for consideration.

During the November meeting OSMA President Kamp informed the trustees that the project had been favorably received in Washington and was in the process of legislative drafting. (A draft bill proposed by Congressman Edwards was circulated to the members of the OSMA Council on Planning and Development meeting held in March, 1984.)

Hospital Medical Staff Council

At the request of the Council on Member Services of the association, the Board of Trustees authorized the formation of a special ad hoc committee to study the creation of some mechanism that would encourage hospital medical staffs to respond to the American Medical Association's creation of a special hospital medical staff section. The committee was authorized during the August meeting and reported back to the trustees during the November meeting.

The ad hoc committee continued its studies into 1984, and at the February meeting recommended to the Board of Trustees that the OSMA create a new full council to be entitled the "OSMA Hospital Medical Staff Council." The trustees approved the recommendation and requested the association's Constitution and Bylaws Committee to draw up an appropriate amendment to those documents that would create such a council for the association. (The appropriate language to create the council is included in the Report of the Constitution and Bylaws Committee.)

It is the recommendation of the Board of Trustees that this council be created and the appropriate amendments be adopted.

OSMA-ERF

The House of Delegates of the OSMA, during its 1983 meeting, authorized the creation of a special education and research fund for the OSMA. The appropriate articles of incorporation, banking account statements, and bylaws were prepared by the association staff and presented to the Board of Trustees for adoption during the August meeting. At that time, the articles of incorporation and the banking statements were formally adopted. Action on the proposed bylaws was tabled for later consideration.

The proposed bylaws for the new OSMA-ERF were formally adopted during the February meeting of the trustees. At that time OSMA Legal Counsel was instructed to proceed with the filing of the incorporation papers and the necessary forms with the Internal Revenue Service to have the new foundation classified as a nonprofit organization for tax deduction purposes. (Because of the reluctance on the part of the IRS to approve any nonprofit organization, this process usually takes several months.)

Diabetes Endowment Fund

In May of 1982 the House of Delegates of the OSMA voted to designate the funds which had previously been contributed to a professorship in continuing medical education to a diabetes professorship at the OU Health Sciences Center. Before these funds were to be released, however, they had to be matched on a dollar-per-dollar basis. During early 1983 Dr C. Alton Brown announced to the association's Board of Trustees that he felt confident that the matching funds could be raised.

Originally the funds were in an account at the Penn Square National Bank. Following the closing of the bank, FDIC officials agreed to release the entire account, which amounted to approximately

\$110,000. The funds were then transferred to another Oklahoma City bank.

In mid-1983 Dr Brown announced that the total matching funds had been raised and asked that the monies be released to match the fund. At the same time he indicated that it was the desire of the Health Sciences Center to utilize only the interest off of the monies.

The board approved a plan whereby the association would pay the interest directly to the center, but would retain the corpus of the funds in its own name. This plan was acceptable to the center and was put into effect.

House of Delegates Special Session

President George Kamp called a special meeting of the OSMA House of Delegates for Saturday, November 19, to determine the association's position on the future of the Oklahoma Foundation for Peer Review. The Board of Trustees concurred in the calling of the special session during its meeting on November 13.

1986 Meeting

Because of difficulties acquiring hotel meeting space it is necessary for the association to schedule its annual meeting at least two years in advance. The Board of Trustees authorized the 1986 annual meeting of the association to be held in Tulsa on May 7-10. Two new hotels in Tulsa are holding those dates for the association at this time.

Allied Members

During the past year the association's Board of Trustees received a request from a group of radiation physicists to be admitted to association membership as allied members. The board acknowledged the request but pointed out that the current bylaws do not provide for nonphysician membership, except on an honorary basis. The problem was referred by the board to the OSMA Constitution and Bylaws Committee for further study.

Additional information was received from the AMA and presented to the board during its February meeting. At that time it was explained that the AMA does accept radiation physicists as affiliate members, but they do not pay dues and receive no benefits or publications, except by subscription. The Board of Trustees then voted to recommend that radiation physicists be accepted as affiliate members of the OSMA, and directed the Constitution and Bylaws Committee to prepare the appropriate amendments to accomplish this.

(The Constitution and Bylaws Committee drafted the correct language that would expand the allied member category to include non-physicians. However, in its report to this House of Delegates, the committee recommends that the amendment *not* be adopted.)

Medical Students

During 1983-84 the association, through the Board

of Trustees, continued its support of the Medical Students Communications Program. This included sponsoring a picnic in both Oklahoma City and Tulsa for medical students.

The board also authorized a grant to the Tulsa County Medical Society so that it might establish a series of medical student luncheon meetings similar to those conducted by the association in Oklahoma City.

Through the office of the Dean of Student Affairs, Dr Dave Steen, a series of medical students have been rotating through the OSMA executive office and spending a week each observing the functioning of the association and its staff.

PLICO Appeal

Any physician member of the association has the right to appeal directly to the OSMA Board of Trustees any adverse decision of the PLICO Board of Directors regarding professional liability insurance coverage. One such appeal was heard during 1983-84. However, as of the time of this annual meeting, at least two or three appeals are pending, and will be heard during the next few weeks.

A single appeal from a former PLICO decision usually takes from one to three hours of hearings and deliberations by the board.

AMA-GTE Project

In mid-1983 the board authorized an experimental installation of the American Medical Association's Medical Information Network in a series of physician offices in Oklahoma. Known as "MINET," this national computerized information network allows a physician to access at least six data bases on such topics as disease information, drug information, current procedural terminology information, clinical literature, and socioeconomic literature.

In addition to the data bases, MINET can also be utilized by the physician as an electronic mail service to contact any other physician, state medical association, or the American Medical Association via computer terminal.

A final report on the six-month experiment and recommendations will be given to the Board of Trustees for consideration during its annual meeting.

County Society Split

The Rogers-Mayes County Medical Society has petitioned the Board of Trustees for permission to split into two county societies. The bylaws of the association authorize the trustees to "recommend" the revocation of a charter or the creation of a new charter for a county medical society to the House of Delegates.

The Rogers-Mayes County Medical Society was notified that the Board of Trustees of the association will recommend that the current society be dissolved and that two new county societies be recognized and chartered during the opening session of the 1984 House of Delegates. These two new county societies will be known as the "Rogers County Medical Society" and the "Mayes County Medical Society."

In order for the two new county societies to be appropriately represented during the deliberations of the 1984 House of Delegates, it will be necessary for the House to formally recognize the two new organizations during the opening session. At that time the old charter will be revoked and two new charters issued. As soon as the House approves the two new charters, the delegates from the two new county societies can be credentialed and seated.

It is the recommendation of the Board of Trustees that the two new societies be created by the House of Delegates.

Council and Committee Reports

Customarily the Board of Trustees hears reports from all of the OSMA councils and committees during each meeting. Since these groups also report directly to the House of Delegates on their yearly activities, their reports to the board will not be reproduced here.

Awards and Presentations

During 1983-84 the Board of Trustees witnessed the presentation of five special awards and authorized a special award to be given during this annual meeting.

Floyd F. Miller, MD, was presented with the A. H. Robins Award during the August 14 meeting. This award is given to a physician for outstanding community service, and only upon the recommendation of a state medical association.

Also during the August meeting two honorary memberships in the association were awarded to Mr Don Blair, Executive Vice-President of PLICO, C. L. Frates & Company; and to Wilson "Dave" Steen, PhD, Dean of Student Affairs for the University of Oklahoma College of Medicine. Honorary membership in the association is presented only to those individuals who have made significant contributions to the advancement of the medical profession.

Two Outstanding Layman Awards were presented this year. During the November meeting Mr William H. Bell, a Tulsa attorney, was presented with the OSMA Outstanding Layman Award. During the February meeting another attorney, Mr George F. Short, Oklahoma City, received an identical award. This award is given for extraordinary service to the medical profession by a layman.

Because of his outstanding service as president of the Physicians Liability Insurance Company, the Board of Trustees of the OSMA has authorized a special distinguished service award to be presented to C. Alton Brown, MD. This award will be presented during the 1984 annual meeting of the House of Delegates.

Life Membership Awards

The following physicians have been awarded life membership in the Oklahoma State Medical Association through application from component societies, and with the approval of the association's Board of Trustees:

R. R. Coates, MD, Chickasha
Charles W. Freeman, MD, Oklahoma City

November 13, 1983

William C. Alston, Jr., MD, Tulsa
Alfred H. Bungardt, MD, Tulsa
Herbert J. Forrest, MD, Tulsa
John F. Gray, Jr., MD, Tulsa
E. N. Lubin, MD, Tulsa
Bryce Petrie, MD, Oklahoma City
Chester R. Seba, MD, Oklahoma City
Hugh B. Spencer, MD, Tulsa

February 19, 1984

Martin H. Bartlett, MD, Sapulpa
Charles J. Bate, MD, Tulsa
Eugene A. Durso, MD, Norman
Fred T. Fox, MD, Lawton
Minor E. Gordon, MD, Claremore
Worth M. Gross, MD, Tulsa
James F. Hohl, MD, Ada
Orval L. Parsons, MD, Lawton
Herschel J. Rubin, MD, Tulsa
Joseph J. Weedn, MD, Duncan
Sol Wilner, MD, Tulsa
Douglas E. Wilson, MD, Lawton
Richard E. Witt, MD, Tulsa

Respectfully submitted,
Michael J. Haugh, MD
Chairman
OSMA Board of Trustees

Supplemental Report of the BOARD OF TRUSTEES

Reference Committee I

Subject: Supplemental Report
Presented by: Michael J. Haugh, MD, Chairman
Referred to: Reference Committee I

Mr Speaker and Members of the House:

The Board of Trustees met at its Annual Meeting earlier this morning, and this supplemental report identifies for the Delegates the actions taken for the board at this meeting. This report will be referred to Reference Committee I to be considered along with the Annual Report of the Board of Trustees, which was included in the Delegate's Handbook. The board meeting was called to order by Michael J. Haugh, MD, Chairman, at 9:15 AM with introductions of guests and announcement that this was the 78th Annual Meeting of the Oklahoma State Medical Association.

The board approved the minutes of its February 19 meeting as written.

George H. Kamp, MD, president, gave his final report to the board as the association's highest elected official and expressed his sincere thanks for the opportunity of serving the association in this capacity.

Mrs Camille Harrison, outgoing president of the OSMA Auxiliary, presented her final report to the board, and stressed the importance of teamwork between the two organizations.

Raymond L. Cornelison, Jr., MD, secretary-treasurer, presented a financial report to the board, and stated the full report is included under Reference Committee I in the handbooks.

Mr Ed Kelsay, OSMA legal counsel, presented a special report on the AMA/GTE project, known as "MINET," or Medical Information NETwork. The system allows a physician to access at least six data bases on such topics as disease information, drug information, current procedural terminology information, etc, as well as access to an electronic mail service. Mr Kelsay noted that this system is being made available through the American Medical Association by distributorship to state medical societies, but is not necessarily an exclusive franchise.

Mr Kelsay directed the trustees to the four options included in the report, developed by the Council on Member Services, as follows in abbreviated form:

Option 1: The OSMA signs as a distributor for MINET and utilizes its own staff and facilities for marketing, maintenance, training, administration, and billing.

Option 2: The OSMA signs as the distributor, but subcontracts with an outside private organization for sales, marketing, training, maintenance, and administration.

Option 3: The OSMA informs GTE that it does not wish to be the distributor, but recommends an outside organization for the distributorship.

Option 4: The OSMA informs GTE it does not wish to be a distributor and makes no recommendation.

Following considerable discussion, the board decided to combine options 1 and 2 for approval, whereby OSMA would accept the distributorship, subcontract the work initially, and take on the responsibility at a later, more appropriate time.

The Report of the OSMA Physicians Committee, which is included in the Delegate's Handbooks under Reference Committee III, was approved by the board for introduction to the House of Delegates.

The PLICO Board requested that PLICO Board Members whose terms expire this year be submitted for approval by the Board of Trustees, to be submitted to the House for re-election to a second term of three years. The nominees are:

C. Alton Brown, MD, Oklahoma City
C. S. "Burr" Lewis, Jr., MD, Tulsa
Edward K. Norfleet, MD, Vinita
John A. McIntyre, MD, Enid
Kenneth W. Whittington, MD, Bethany
Advisory Board Member:
Billy Dale Dotter, MD, Okeene

The Board of Trustees approved the following nominees to serve on the Board of Directors for the Oklahoma Foundation for Peer Review:

M. Boyd Shook, MD, Position 1
(Oklahoma County)
Howard B. Keith, MD, Position 2
(At Large except Oklahoma and Tulsa Counties)

William M. Leebron, MD, Position 2
(At Large)

Rollie E. Rhodes, MD, Position 5
(Tulsa County)

J. B. Wallace, MD, Position 6
(At Large except Oklahoma and Tulsa Counties)

Steven Landgarten, MD, Position 7
(Tulsa County)

Norman A. Cotner, MD, Position 12
(At Large)

The above nominees will be advanced to the OFPR Board of Directors for consideration.

After considerable discussion concerning the existing travel policy and a proposed new policy, the board decided to keep the existing travel policy and allow the staff to clarify vague areas within the policy.

Four late resolutions were approved by the board for recommendation to the House, #16, Hazards of Smoking; #17, Medicare Attestation; #18, Smokeless Tobacco; and #19, Commendation of Edward K. Norfleet, MD.

Special Membership Applications were submitted to the board for approval. The following Dues Exemption applications are listed, along with the board's decision on each:

Twilah A. Fox, MD, final decision pending
Buddy L. LeCrone, MD, tabled
Carl E. Pfanstiel, MD, 1/2 dues granted for one year
Lawrence R. Schwartz, MD, exemption denied
Howard K. Scott, MD, exemption granted for one year

The board approved the following individuals for Life Membership status:

E. Stanley Berger, MD, Oklahoma City
J. C. Devine, MD, Tulsa
John F. Kuhn, MD, Oklahoma City
Bertha M. Levy, MD, Oklahoma City
Philip Joseph, MD, Sapulpa
Wiley T. McCollum, MD, Oklahoma City
Thomas C. Points, MD, Oklahoma City
Jack H. Reynolds, MD, Muskogee
Orville M. Rippy, MD, Stillwater
W. W. Rucks, Jr., MD, Oklahoma City
Robert L. Shore, MD, Lawton

The Board re-elected Michael J. Haugh, MD, and Kenneth W. Whittington, MD, as chairman and vice-chairman, respectively.

The board approved three of its members to serve as advisors to the OSMA Auxiliary for 1984-85, Drs George H. Kamp, J. B. Eskridge III, and Michael J. Haugh.

There was considerable discussion concerning annual meeting sites. A motion was introduced whereby Shangri-La would be eliminated as a future meeting site. The motion failed with the idea that the meeting sites be left open for the board to consider each year.

Special Item: The Council on Planning and Development made an extensive survey of compensation to presidents of state medical societies. OSMA originally provided its president an honorarium of \$1,000 a year, and it was later raised to \$5,000 a year. After

Proceedings *(continued)*

reviewing considerable information the Council on Planning and Development recommended to the Board of Trustees at its November meeting that the presidential honorarium be increased to \$12,000 per year. The board approved the recommendation with the stipulation that the amount be reviewed annually and that the House of Delegates approve the increase. That action was inadvertently omitted from the Board of Trustees Annual Report.

There being no further business, the board adjourned at 11:50 AM.

Oklahoma State Medical Association BOARD OF TRUSTEES

Report A

Subject: Penn Square Bank
Presented by: Raymond L. Cornelison, Jr., MD,
Secretary-Treasurer
Referred to: Reference Committee I

Introduction:

At the time of the Penn Square Bank failure (July 5, 1982), the association had on deposit, in several accounts and in Certificates of Deposit, \$688,302.12. Through negotiation with the FDIC \$256,384.11 was withdrawn, leaving a balance of \$431,918.01. On March 24, 1984 the FDIC paid the association \$73,787.72. The bank still owes OSMA \$358,130.29.

We have been advised by the FDIC that another disbursement will be made this spring (no date has been set.)

For accounting purposes, one-half of the balance has been written off the association books, and the 1984 budget does not anticipate recovery.

This is an informational report.

Oklahoma State Medical Association BOARD OF TRUSTEES

Report B

Subject: Lloyd's of London and other Insurers
Presented by: Raymond L. Cornelison, Jr., MD
Secretary-Treasurer
Referred to: Reference Committee I

General:

In 1976 the OSMA House of Delegates approved for calendar year 1977 an excess limits liability insurance plan with Lloyd's of London. The plan provided \$900,000 of coverage over the \$100,000 policy issued by INA. The arrangements required a total deposit of \$2.1 million, of which \$1,290,000 was immediately ceded to the insurers. The balance was held on deposit in Oklahoma, against which letters of credit were issued to protect the insurers against unanticipated losses. Any portion of the \$810,000 not used to pay claims was to be returned to OSMA.

The contract between the insurers and the association expired in January, 1984, and we have been negotiating for the return of the deposits for several months. There are still potential claims against the insurers, although they appear to be relatively insignificant. One condition required by the insurers for release of the money is that OSMA find an acceptable re-insurer for the potential risk. The Board of Trustees has previously instructed us to discuss with PLICO the possibility of assuming the burden of acquiring the re-insurance. It appears that an acceptable contract permitting full release of the money will be accomplished soon.

Assuming the full amount due OSMA is returned (which includes accumulated interest), the association will receive approximately \$1,400,000. A special committee was appointed by Dr Kamp to review the history of the Fund and to recommend an appropriate distribution of the monies to the Board of Trustees.

The committee has met and discussed in great detail the possible uses for the money, and it has considered:

- 1) the ownership of the Fund;
- 2) the long-range needs of OSMA;
- 3) the re-insurance obligations of PLICO;
- 4) the best way to provide benefits to OSMA members
- 5) special OSMA projects and obligations for members, residents, and students;
- 6) other considerations

At the time the Fund was created, the OSMA-sponsored program was only available to members of the association; therefore, the association membership is the legitimate owner of the Fund. Mr Roy Lytle, General Counsel for OSMA at the time the insuring arrangement was made, recommended that in the event a recovery was made that the funds not be returned directly to OSMA members because of potential IRS complications. Thus, it appears that the best way to reward members of the association is either through additional OSMA benefits or insurance benefits.

Because of the failure of Penn Square Bank, the association has not received interest income from its surplus. Operating income was reduced by approximately \$35,000 in 1983 because of the restricted surplus. In addition, the board has authorized special expenditures during 1983 which, along with necessary unanticipated expenditures, has resulted in the first operating net loss for the association since 1978. A restoration of the surplus would result in additional income and could negate the necessity of raising association dues.

Based upon reported claims, established reserves, and time elapsed, there is not a substantial risk to PLICO for assuming the incurred but not reported claims that might result from the Lloyd's of London insuring arrangement; however, actuarially, PLICO would be entitled to some premium for assuming that risk. In addition, because of the decision by OSMA and PLICO to offer health and accident insurance, the premium of PLICO is considerably higher than estimated at the time the company was formed. Insurance companies are evaluated (in addition to other criteria) on the basis of premium-to-surplus ratio —

3 to 1 is an acceptable industry standard. With net premium income in excess of \$15 million and capital and surplus of \$3.5 million, PLICO is undercapitalized.

In 1977 the association established an Endowment Fund for Medical Education, and in 1982 we agreed to dedicate that fund to endow a Chair in Diabetes at OUHSC. For investment purposes, the money was comingled with the association's operating accounts, which for the most part were invested in CDs at Penn Square Bank. When the bank failed, the FDIC released the endowment fund as a separate account, but a new account has only recently been established and has not been fully funded.

The Board of Trustees and the House of Delegates have approved in recent years special projects that will and could require substantial financial commitments. The decision to buy a computer capable of accommodating OFPR's processing needs will require a considerable initial outlay (which will be recovered in two years), and the creation of a student loan program and an impaired physician program could cause cash demands of large proportions.

Recent changes in reimbursement procedures for medical care and the potential for even more dramatic changes in the future have resulted in an unre-

cedented demand on the association for services not heretofore rendered. Responding to this membership need may lead to unusual expenditures not anticipated.

Recommendation:

For all the cited reasons and others, the committee recommends that, should the Lloyd's of London fund be fully recovered, that it be distributed as follows:

- 1) \$400,000 plus to restore the OSMA surplus and the Endowment Fund, and to be used to pay for the implementation of the Management Study recommendations;
- 2) \$500,000 be contributed to PLICO for assuming the Lloyd's of London risk and to bolster PLICO's capital;
- 3) \$500,000 be deposited to an OSMA Endowment, the interest of which will be used to fund special OSMA projects and against which will be issued a letter of credit to PLICO.

Respectfully submitted,
Raymond L. Cornelison, Jr., MD
Secretary-Treasurer

Lytle, Soulé, Curlee, Harrington, Chandler & Van Dyke
Attorneys and Counselors
2210 First National Center
Oklahoma City, Oklahoma 73102

April 4, 1984

Mr David Bickham
The Oklahoma State Medical Association
601 Northwest Expressway
Oklahoma City, Oklahoma 73118

Dear Mr Bickham:

You have requested our advice as to possible income tax aspects of the anticipated return to OSMA of funds heretofore transferred to provide protection to Lloyd's of London against unanticipated losses from professional liability excess insurance issued to members of the Association.

We understand that several years ago the members of the Association determined that additional professional liability insurance coverage should be obtained beyond the \$100,000.00 of coverage then provided by INA. It was found that Lloyd's of London would provide the desired excess coverage to \$1,000,000.00, conditioned upon the members of the Association raising \$2,100,000.00 to protect Lloyd's against unanticipated losses. That plan was implemented and the required amount was obtained. It was understood that if and when Lloyd's ceased to have liability a certain portion of the deposit, if not used by Lloyd's, would be returned to the Association.

It has now developed that Lloyd's is no longer on the coverage and there is an amount not used by Lloyd's to be returned to the Association. You have inquired as to whether the amount to be received from Lloyd's would constitute unrelated business taxable income, within Sections 512 and 513 of the Internal Revenue Code. It is our opinion that these funds will not become unrelated business taxable income, for the reasons set out below.

Section 512 defines "unrelated business taxable income" as being "the gross income derived by any organization from any unrelated trade or business (as defined in Section 513) *regularly carried on by it* . . ."

Section 513 defines "unrelated trade or business" as being "any trade or business the conduct of which is not substantially related . . . to the exercise or performance by such organization of its charitable, educational, or other purposes."

Several court decisions have dealt with situations in which an association had a continuing relationship with one or more insurance underwriters which provided the association with a designated percentage of premiums received by the underwriter from members of the association. In these cases it was determined that the insurance activities of the association constituted a "trade or business" under Section 513, that it was "regularly carried on," and that the income was taxable to the association because the insurance activities were not substantially related to the exempt function of the association. These cases include *Professional Insurance Agents of Michigan v. Commissioner*, — F. 2d —, 84-1 U.S.T.C. 9177 (6 Cir., 1984); *Louisiana Credit Union League v. United States*, 693 F. 2d 525 (5 Cir., 1982); and *Carolinas Farm & Power Equipment Dealers Association v. United States*, 699 F. 2d 167 (4 Cir., 1983).

In the Michigan case it was emphasized that the motive of the association was to obtain revenue for the association. The court concluded that "Since PIA's insurance premium benefits are basically a fund raising activity, it is by definition unrelated business activity under Section 513(a). It is not the sort of unique activity that satisfies the substantial relationship test . . ." The Louisiana case emphasized that "the existence of a *profit motive* is the most important criterion for the finding that a given course of activity constitutes a trade or business." It found that the business was "regularly carried on" and "not the sort of unique activity that satisfies the substantial relationship test." In the Carolinas case the court noted that the premium rebates amounted to about half the income of the association and concluded that "the Association carried on its insurance activities to earn a profit." The court stated "We follow the Fifth Circuit and the Tax Court, because we think that there is no better objective measure of an organization's motive for conducting an activity than the end it achieves." It held that the insurance activities of the association were not substantially related to the charitable purpose.

Significant distinctions exist between the facts of your case and the facts described in the cited cases, and in our view these are

Proceedings (continued)

sufficient to distinguish your case from the cited cases and produce an opposite result.

The most obvious distinction is that your case is not one in which there was a continuing income from insurance "regularly carried on" (in the language of Section 512). To the contrary, in your case we are dealing with a one-time event.

Secondly, the "profit motive" factor is not present in your case. In the three cited court cases it was an intended purpose of the association to generate income on a continuing basis from the rebates of insurance premiums. To the contrary, in your case the motive in establishing the arrangement was to obtain insurance protection for members that was not otherwise available to them. In no sense at all can it be said that there was a profit motive in the receipt by the Association of this money. The essence of this distinction is noted

at the end of the Carolinas court decision where the court states "Where a service is available in the marketplace, a trade association need not provide it to accomplish an exempt purpose." The point of this statement was that the association was voluntarily in the insurance business although the members could have purchased, without association involvement, all of the insurance they needed or desired. To the contrary, your members could not do so, and the Association was in truth acting to accomplish a beneficial purpose for the members when the arrangements were established with law.

Under these circumstances we believe that the three cited cases are inapplicable and that the funds in question will not constitute taxable income to the Association.

Sincerely yours,
Edward E. Soule

Report of the SECRETARY-TREASURER

Reference Committee I

Subject: Annual Report

Presented by: Raymond L. Cornelison, Jr., MD
Secretary-Treasurer

Referred to: Reference Committee I

Introduction:

The financial information in your handbook includes:

- A. The Price Waterhouse year-end Audit (Jan 1-Dec 31, 1983);
- B. The Budget and Audit Committee's Review of the Auditor's Report;
- C. Balance Sheets and Income and Expense Statements for the First Quarter of 1984;
- D. A Proposed Budget for 1984;
- E. Report A of the Board of Trustees, which is an update on the Penn Square Bank liquidation;
- F. Report B of the Board of Trustees that details distribution of certain deposits recovered from Lloyd's of London and other insurers.

Annual Audit:

The Annual Audit of our accountants, Price Waterhouse, lists assets of \$4.6 million, down from \$5.1 million in 1982. The decrease reflects a reported loss in PLICO of \$481,873 and an excess of expenditures in the OSMA General Operations Budget. However, it should be noted that current assets of the association are almost \$100,000 greater at the close of business in 1983 than in 1982. Liabilities and fund balances are essentially the same as in 1982. Current liabilities are slightly higher than last year because of an increase in deferred income, which reflects an increase in membership and will be pro-rated throughout the year. Fund balances are down slightly, reflecting the deficit spending of 1983.

The liquidity of the association can be estimated as follows:

Current Assets	\$840,789
Current Liabilities	\$923,041
Less Deferred Income	658,660
Actual Current Liabilities	264,381
Funds Available for Operations	\$576,408

Compared to 1982 the association is in a better cash position in 1983 by more than \$50,000.

Revenue and Expense:

The revenue and expense sections of the report show a decrease in income and an increase in expenses, resulting in a net loss of \$68,815. (Total deficiency \$550,693 minus 481,878 PLICO equals \$68,815.) \$41,095 of the OSMA loss is amortization of the organizational expense of PLICO and depreciation, neither of which is a real monetary loss. Thus, the actual excess of expenditures over income in the association's operations is \$27,720.

In 1983 the association had a normal increase in every revenue producing category (There is a minor audit error in lease income.) except in interest and commissions. Because of the Penn Square Bank failure and nationwide deflation in interest rates, the 1983 interest income was almost \$40,000 less than in 1982. In addition, the Board of Trustees approved unbudgeted expenditures of over \$30,000, the combination of which more than accounts for the real deficit.

General Membership Expense:

The cost of the association's operations was up slightly in 1983 and reflects normal increases in salaries approved by the Board of Trustees, expanded operations including the cost of two new delegates to the AMA, and special projects approved by the board and the House of Delegates. These special projects include our management study, the Medicare Demonstration Project, representation at the AMA Health Policy Agenda meetings, special medical student activities, and the cost of testing the AMA/GTE communications program (see Council on Member Services Report). Some of these items are nonrecur-

ring, but others will have to be accommodated in the 1984 and subsequent budgets.

The rest of the audit describes in more detail the various operations of the association, which are adequately explained in the accountants' notes.

Budget and Audit Committee Report:

This committee reviews the accountants' report to determine if it is consistent with association policy and conforms to accounting principles acceptable to the membership.

Quarterly Report:

(The First Quarter Financials will be presented at the annual meeting.)

1984 Budget:

The 1984 Budget is based on a realistic and historical projection of revenues and expenses. It is constructed differently than the audit in that it records gross income and gross expense before auditing adjustments and refinements. Income is expected to be approximately one million dollars, and expenses are projected to be about \$930,000, leaving the association an excess of income over expenses in 1984 of \$30,000 to \$40,000. It should be noted, however, that there are a number of variables, any of which could distort the Budget considerably:

- 1) Interest income is predicated on the recovery of funds from Lloyd's of London and other insurers and on decisions made by the Board of Trustees. Should these predictions be altered by decisions of the House of Delegates, interest income could be altered;
- 2) Lease income is based on existing contracts with OFPR, the Oklahoma Hospital Association, and the Oklahoma County Medical Society. Should those contracts be altered or canceled, budgeted income from these sources might be jeopardized;
- 3) OSMA has a contract with OFPR for computer services based on an assumption that the foundation will be awarded a contract from the Health Care Financing Administration to be the Professional Review Organization for Oklahoma. Should the foundation not receive the contract, the association will have a substantial liability with no income.

The Budget presented does not reflect the positives or negatives of these possibilities, except for the interest income from the Lloyd's of London refund, which has been released by all principals concerned.

The Budget has been reviewed by the Secretary-Treasurer, the Board of Trustees, and the Council on Long-Range Planning and Development. It accurately projects income and expenses as can be determined at this time.

Report A of the Board of Trustees:

The association has claims against Penn Square Bank totaling \$358,130.29. Report A of the Board of Trustees is a status report on the liquidation of the bank's assets. The Budget presented to the Delegates does not anticipate a recovery, although one is anticipated.

Report B of the Board of Trustees:

In 1976 the House of Delegates approved an excess limits liability insurance arrangement with Lloyd's of London and other insurers, which required substantial security deposits in Oklahoma banks that could be refunded to OSMA if losses were less than projected. Report B details the substance of that agreement and the distribution of the deposits. The Budget assumes the House of Delegates will sustain the Board of Trustees' decision.

Summary and Conclusions:

The reports submitted are as accurate as can be determined at this time. They represent the operations of the association and its projected activities as planned by its various councils, committees, and governing bodies. The association is in good financial condition and can maintain the programs outlined in the reports to the House of Delegates barring unforeseen events and unanticipated expenditures. Based on these reports, the Secretary-Treasurer recommends no changes in dues for 1985. We should also add that there has been no OSMA dues increase since 1982.

Respectfully submitted,
Raymond L. Cornelison, Jr., MD
Secretary-Treasurer

Oklahoma State Medical Association

**MEMBERSHIP REPORT
MAY 7, 1984**

	1983	1984
Regular Membership	2,954	3,073
Junior Members		
(Residents & Students)	327	378
Life Members	281	300
Affiliate Members	16	6
Hardship Members	4	4
Total Members	3,682	3,761
Pending Members	187	250
	3,869	4,011
Non-Members	527	483

**Oklahoma State Medical Association
FINANCIAL STATEMENTS
DECEMBER 31, 1983 and 1982**

Colcord Building
15 North Robinson
Oklahoma City, Oklahoma 73102
405 272-9251

February 3, 1984

House of Delegates
Oklahoma State Medical Association
Oklahoma City, Oklahoma

We have examined the balance sheets of Oklahoma State Medical Association as of December 31, 1983 and 1982 and the related statements of revenues and expenses, changes in unappropriated fund balances and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We did not examine the financial statements of Physicians Liability Insurance Company, a wholly owned subsidiary, which statements reflect total assets and net (loss) constituting 68 percent and 88 percent in 1983 and 71 percent and

12 percent in 1982, respectively, of the totals. These statements were examined by other independent auditors whose report dated March 6, 1984 expressed an unqualified opinion on those statements, and our opinion expressed herein, insofar as it relates to the amounts included for Physicians Liability Insurance Company, is based solely upon the report of the other auditors.

Oklahoma State Medical Association does not provide for depreciation on buildings as is required by generally accepted accounting principles.

In our opinion, based upon our examinations and the report of other auditors, except as noted in the preceding paragraph, the financial statements referred to above present fairly the financial position of Oklahoma State Medical Association as of December 31, 1983 and 1982, the results of its operations and the changes in its financial position for the years then ended in conformity with generally accepted accounting principles applied on a consistent basis.

Our examinations were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedules are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information has been subject to the auditing procedures applied in the examinations of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Price Waterhouse

Oklahoma State Medical Association

BALANCE SHEET

Assets	December 31,		Liabilities and Fund Balances	
	1983	1982	December 31,	
	1983	1982	1983	1982
Current Assets			Current Liabilities	
Cash	\$ 8,195	24,197	Current portion of long-term debt	
Savings accounts and certificates of deposit	217,981	94,241	— Note 4	\$ 10,292 15,643
Accounts receivable	609,896	633,133	Accounts payable — Note 3	254,639 209,047
Prepaid expenses	4,717	6,218	Loans and scholarships payable	100 200
Total Current Assets	840,789	757,789	Accrued liabilities —	
			Retirement plan — Note 5	(650) 13,200
			Deferred income — Note 6	658,660 617,935
			Total Current Liabilities	923,041 856,025
Property and Equipment —			Long-Term Debt — Note 4	
Partially pledged to secure long-term debt — Note 4 —			Notes payable — Secured by partial pledge of property and equipment	144,418 158,755
Land	7,808	7,808	Less: Current portion included above	10,292 15,643
Building	379,515	379,515		134,126 143,112
Pavement	2,451	2,451		
Furniture, fixtures and equipment	156,442	135,345	Commitments and Related Party Transactions — Notes 7 and 8	— —
Equipment under capital lease	25,650	25,650		
			Fund Balances	
	571,866	550,769	Appropriated for public education	35,619 35,619
Less: Accumulated depreciation	114,000	97,285	Appropriated for building maintenance	30,217 30,217
	457,866	453,484	Unappropriated	3,449,134 3,999,827
				3,514,970 4,065,663
Investment in Subsidiary —			Total	\$4,572,137 5,064,800
Note 11	3,105,224	3,587,102		
Other Assets				
Due from Federal Deposit Insurance Corporation —				
Net of allowance of \$211,401 —				
Note 2	137,614	211,402		
Loan acquisition costs — Net of amortization	4,721	5,160		
Organization expense — Subsidiary — Net of amortization	23,940	47,880		
Deposits	1,983	1,983		
	168,258	266,425		
Total	\$4,572,137	5,064,800		

The accompanying accountants' report and notes are an integral part of these financial statements.

**Oklahoma State Medical Association
Notes To Financial Statements**

(1) Significant Accounting Policies —

The following is a summary of certain significant accounting policies followed in the preparation of these financial statements. Except for the omission of depreciation on the building, these policies conform to generally accepted accounting principles:

Property and equipment

Property and equipment, including the capitalized lease, is recorded at cost. Depreciation of the property, except the building, is computed using the straight-line method over estimated useful lives ranging from 3 to 10 years.

Capital lease —

The capital lease is accounted for under the Statement of Financial Accounting Standards No. 13, Accounting For Leases. Under this method of accounting for capital leases, the asset is amortized on a straight-line basis over the useful life of the asset (ten years) and the obligation, including interest thereon, is liquidated over the life of the lease.

Deferred income —

All income is prorated over the period to which it applies.

Investment in subsidiary —

Investment in Physicians Liability Insurance Company (a wholly-owned subsidiary) is accounted for by the equity method. Under this method the Association's equity in the net earnings or losses of the subsidiary is included currently on the Association's statement of revenues and expenses. Any dividends received from the subsidiary will be reflected as a reduction of the investment. The carrying value of the investment approximates the underlying equity of the subsidiary.

Loan acquisition costs —

Loan acquisition costs are amortized on a straight-line basis over the life of the loan.

Organization expense — Subsidiary —

Organization expense is amortized on a straight-line basis over a five-year period.

Organization —

The Association was organized as a nonprofit organization and, as such, is exempt from income taxes under Section 501(c)(6) of the Internal Revenue Code.

**Oklahoma State Medical Association
Statement of Revenues and Expenses**

	Year ended December 31,	
	1983	1982
From Operations		
Revenue	\$ 681,798	701,877
Expenses	<u>617,482</u>	<u>547,319</u>
Excess of Revenue Over Expenses From Operations	<u>64,316</u>	<u>154,558</u>
JOURNAL		
Revenue	89,432	90,717
Expenses	<u>137,814</u>	<u>140,921</u>
Excess of Expenses Over Revenue from JOURNAL	<u>(48,382)</u>	<u>(50,204)</u>
Annual Meeting		
Revenue	31,556	6,923
Expenses	<u>105,904</u>	<u>65,793</u>
Excess of Expenses Over Revenue From Annual Meeting	<u>(74,348)</u>	<u>(58,870)</u>
Excess (Deficiency) of Revenues Over Expenses Before Other Revenue (Expenses) and Extraordinary Item	<u>(58,414)</u>	<u>45,484</u>
Other Revenue (Expenses)		
Special assessment	13,539	1,231,878
Income (Loss) from investment in subsidiary — Note 11	(481,878)	138,270
Amortization of organization expense — Subsidiary	(23,940)	(23,940)
	<u>(492,279)</u>	<u>1,346,208</u>
Excess (Deficiency) of Revenues Over Expenses Before Extraordinary Item	(550,693)	1,391,692
Extraordinary Item — Note 2	<u>—</u>	<u>(211,401)</u>
Excess (Deficiency) of Revenues Over Expenses	<u>\$ (550,693)</u>	<u>1,180,291</u>

The accompanying accountants' report and notes are an integral part of these financial statements.

(2) Due From Federal Deposit Insurance Corporation —

The Association had cash on deposit and certificates of deposit totaling \$679,187 in Penn Square Bank of Oklahoma City, Oklahoma in July, 1982 when the Bank was closed by the Federal Deposit Insurance Corporation (FDIC). Of this amount, \$243,071 was determined by the FDIC to be covered by its insurance and has been recovered by the Association. The remainder, however, is being reflected as a receivable from the FDIC and will be repaid only as the ultimate liquidation of the Bank's assets permit and only in the amounts available to other unsecured creditors on a pro rata basis. For financial purposes, this receivable was originally valued at approximately 50 percent of its face value.

(3) Accounts Payable —

The following is a summary of the accounts payable:

	1983	1982
Trade	\$ 37,992	36,845
Dues	67,733	46,725
Leebron Memorial Fund	6,459	6,440
Medical education endowment	130,955	105,955
Other	11,500	13,082
Total	<u>\$ 254,639</u>	<u>209,047</u>

**Oklahoma State Medical Association
Statement of Changes In Unappropriated Fund Balance**

	Year ended December 31,	
	1983	1982
Beginning of period	\$3,999,827	2,819,536
Excess (Deficiency) of revenues over expenses	<u>(550,693)</u>	<u>1,180,291</u>
End of period	<u>\$3,449,134</u>	<u>3,999,827</u>

The accompanying accountants' report and notes are an integral part of this statement.

Proceedings (continued)

(4) Long-Term Debt —

The following is a summary of long-term debt:

	1983		1982	
	Current Portion	Long- Term Portion	Current Portion	Long- Term Portion
Installment note payable to a company—Secured by equipment—Payable in 60 monthly payments of \$489 including interest at 11 percent—Commencing January, 1979	\$ —	—	5,536	—
Installment note payable to a company—Secured by real estate—Payable in 180 monthly payments of \$1,448 and one payment of \$69,548 at the end of note including interest at 10 percent—Commencing November, 1979	3,792	133,883	3,431	137,401
Capitalized lease—Secured by certain equipment—Payable in 60 monthly payments of \$582 including interest	6,500	243	6,676	5,711
	<u>\$ 10,292</u>	<u>134,126</u>	<u>15,643</u>	<u>143,112</u>

Amounts due on long-term debt in future years as of December 31, 1983 are as follows:

1985	\$ 4,431
1986	4,627
1987	5,111
1988	5,647
1989-1993	38,609
1984 (Term)	75,701
	<u>\$134,126</u>

(5) Retirement Plan —

The Association has a defined benefit pension plan which covers employees who are twenty-four and one-half years of age or older and have at least six months of service. The plan has a fiscal year of June 1 to May 31. The total pension expense for 1983 and 1982 is \$25,783 and \$21,524, respectively. The amount of accrued pension expense for the year is funded by the Association in annual contributions to the pension plan. The actuarial present value of the accumulated benefits to participants of the plan and the net assets available for those benefits as of the beginning of the plan years 1983 and 1982 is as follows:

	1983	1982
Actuarial present value of the accumulated plan benefits*—	\$ —	—
Vested	12,231	—
Nonvested	115	—
Total	<u>\$12,346</u>	<u>—</u>
Net assets available for benefits	<u>\$87,657</u>	<u>81,020</u>

*The actuarial present values for 1982 were not calculated by the Association's actuary.

In determining the actuarial present value of the accumulated plan benefits, an assumed weighted average rate of 6 percent was used.

(6) Deferred Income —

The following is a summary of deferred income:

Oklahoma State Medical Association Statement of Changes In Financial Position		Year ended December 31,	
		1983	1982
Working Capital Provided			
From operations—			
Excess (Deficiency) of revenues over expenses before extraordinary item	\$ (550,693)	1,391,692	
Expenses (Income) not affecting working capital during the current period—			
Equity in loss (income) of subsidiary	481,878	(138,270)	
Depreciation and amortization	41,095	41,980	
Total from Operations	(27,720)	1,295,402	
Decrease in due from Federal Deposit Insurance Corporation	73,788	—	
Total Working Capital Provided	46,068	1,295,402	
Working Capital Used			
Purchase of property and equipment	21,098	9,299	
Investment in subsidiary	—	1,350,000	
Reclassification of amounts due from Penn Square Bank	—	422,803	
Decrease in long-term debt	8,986	15,726	
Total Working Capital Used	30,084	1,797,828	
Increase (Decrease) in Working Capital	\$ 15,984	(502,426)	
Changes In Components of Working Capital			
Increase (Decrease) in current assets			
Cash	\$ (16,002)	4,694	
Savings accounts and certificates of deposit	123,740	(1,034,559)	
Accounts receivable	(23,237)	(611,446)	
Accrued interest receivable	—	(10,048)	
Prepaid expenses	(1,501)	(604)	
	83,000	(1,651,963)	
(Increase) Decrease in current liabilities—			
Current portion of long-term debt	5,351	(3,075)	
Accounts payable	(45,592)	(58,630)	
Loans and scholarships payable	100	100	
Accrued liabilities	13,850	2,583	
Deferred income	(40,725)	1,208,559	
	(67,016)	1,149,537	
Increase (Decrease) in Working Capital	\$ 15,984	(502,426)	

The accompanying accountants' report and notes are an integral part of these financial statements.

	1983	1982
Dues	\$652,910	617,935
Annual meeting	5,750	—
	<u>\$658,660</u>	<u>617,935</u>

(7) Commitments —

Purchase commitment —

The Association has entered into a contract to purchase computer hardware and software totaling \$194,000, of which \$30,000 was paid at the time the contract was executed. The financing of the balance of the contract has not yet been determined.

Long-term leases —

The following is a summary, by year, of lease agreements entered into by the Association at December 31, 1983:

	1984	1985	1986
Automobiles	\$ 13,271	6,464	2,373

(8) Related Party Transactions —

For the years ended December 31, 1983 and 1982, the Association had an agreement with Physicians Liability Insurance Company, a wholly-owned unconsolidated subsidiary, to provide loss prevention services for the insurance company. The Association was reimbursed \$100,000 and \$100,000, respectively, for their expenses on the project.

(9) Professional Liability Stabilization Program —

The Professional Liability Stabilization Program was established during the year ended May 31, 1976 by assessing the doctors a 15 percent surcharge on their basic professional liability policies. The Insurance Company of North America provided the basic \$100,000/\$300,000 policy. This money is under the control of two trustees, one appointed by the Association and one appointed by the insurer. As of December 31, 1983 the balance on deposit was \$436,543, which is not included in the financial statements. The funds will be used if the insurer's reserves are exhausted through payment of claims.

**Oklahoma State Medical Association
Schedule of Revenues**

	Year ended December 31,	
	1983	1982
From Operations		
Membership dues	\$587,444	582,595
Interest and commissions	36,922	73,555
Building lease	31,440	34,060
Membership directory	20,766	6,984
Underwriting and risk management surcharge	—	161
Computer	5,226	4,522
Total Revenue From Operations	<u>\$681,798</u>	<u>701,877</u>
From JOURNAL		
Subscriptions allocated from dues	\$ 31,610	31,431
Advertising and sales	57,822	59,286
Total Revenue From JOURNAL	<u>\$ 89,432</u>	<u>90,717</u>
From Annual Meeting		
Exhibit fees	\$ 9,750	—
Contributions	2,300	6,923
Ticket sales	19,401	—
Class reunion	105	—
Total Revenue From Annual Meeting	<u>\$ 31,556</u>	<u>6,923</u>

(10) Professional Liability Excess Coverage —

During the fiscal year ended March 31, 1977, an insurance plan was formed with Hartford and Lloyd's of London to provide excess professional liability coverage. The excess liability policy was to cover losses in excess of \$100,000 and less than \$1,000,000 that exceed \$3.25 million per year. In accordance with the plan, a specified portion of the insurance premiums were deposited in a bank in the name of Oklahoma State Medical Association. The balance of the account on December 31, 1983 was \$1,291,952, which is not included in the financial statements. The funds will be used if the insurers' reserves are exhausted through payment of claims.

**Oklahoma State Medical Association
Schedule of Expenses**

	Year ended December 31,	
	1983	1982
General Membership Expenses		
Salaries	\$281,050	263,360
Awards	1,650	4,876
Councils	78,942	77,210
Data processing	1,903	2,830
Depreciation and amortization of leased equipment	16,716	17,600
Dues and subscriptions	2,995	4,305
Equipment rental	33,085	24,775
In-state travel	2,845	2,058
Insurance	36,039	29,493
Interest	14,879	17,432
Legal and professional	16,700	11,323
Loss prevention project	30,206	38,161
Membership directory	18,585	—
Office supplies	17,028	23,632
OSMA newsletter	6,764	—
Out-of-state travel and AMA convention expense	64,633	57,028
Payroll taxes	21,230	19,421
Pension costs	25,783	21,524
Postage and shipping	27,915	23,131
Repairs and maintenance	4,512	10,295
Services	3,574	2,032
Staff and officers' expense	23,051	13,328
Telephone and utilities	26,586	32,444
Other general expense	8,826	1,866
Total Before Allocation of Overhead	<u>765,497</u>	<u>698,124</u>
Expense reimbursement from subsidiary	(100,000)	(100,000)
Overhead allocated to JOURNAL	(18,833)	(23,963)
Overhead allocated to annual meeting	(29,182)	(26,842)
Total General Membership Expenses	<u>\$617,482</u>	<u>547,319</u>
Council Expenses		
Governmental activities	\$ 44,289	32,337
Medical education	361	230
Medical services	381	(1,077)
Member Services	5,535	(1,051)
Planning and development	7,505	7,187
Professional and public relations	20,862	39,553
Public and mental health	9	31
Total Council Expenses	<u>\$ 78,942</u>	<u>77,210</u>

Proceedings *(continued)*

(11) Investment in Subsidiary —

The following is a condensed balance sheet and statement of operations for the unconsolidated subsidiary:

The following is a condensed balance sheet and statement of operations for the unconsolidated subsidiary:			Total Liabilities and Stockholders' Equity		<u>\$22,652,121</u>	<u>18,278,789</u>
	<u>December 31,</u>					
	<u>1983</u>	<u>1982</u>				
Assets —			Revenue —			
Cash	\$ 1,224,571	948,567	Premiums earned	\$13,923,861	9,475,204	
Investments	21,043,537	16,942,142	Investment income	<u>2,207,552</u>	<u>2,083,792</u>	
Other	<u>384,013</u>	<u>388,080</u>		<u>16,131,413</u>	<u>11,558,996</u>	
	\$22,652,121	18,278,789	Expenses —			
Liabilities and stockholders' equity —			Losses	13,782,634	9,009,136	
Unearned premiums	\$ 1,576,121	1,463,209	Loss adjustment	437,288	296,737	
Losses and loss adjustment expense	16,510,751	11,914,441	Other operations	2,435,369	2,072,853	
Other	1,460,025	1,314,037	Income taxes	<u>(42,000)</u>	<u>42,000</u>	
Total stockholders' equity	<u>3,105,224</u>	<u>3,587,102</u>		<u>16,613,291</u>	<u>11,420,726</u>	
			Net Income (Loss)	\$ (481,878)	138,270	

Oklahoma State Medical Association

Balance Sheet March 31, 1984

Current Assets

Cash	\$ (23,127)
Savings accounts and certificates of deposit	647,920
Accounts receivable	84,364
Prepaid expenses	7,876
Total Current Assets	717,033

Property and Equipment

Land	7,808
Building	379,515
Pavement	2,451
Furniture, fixtures, and equipment	198,722
Equipment under capital lease	25,650
	614,146
Less: Accumulated depreciation and amortization	118,937
	495,209

Investment In Subsidiary

	3,105,224
--	-----------

Other Assets

Deposits	1,983
Loan Acquisition costs — Net of amortization	4,611
Organization expense — Subsidiary	17,955
Accounts receivable — FDIC	137,614
	162,163

Total \$4,479,629

Liabilities and Fund Balances

Current Liabilities

Current portion of long-term liabilities	\$ 5,611
Current obligation under capital lease	3,816
Accounts payable	269,868
Loans and scholarships payable	100
Accrued liabilities	8,895
Retirement expense	(650)
Deferred income	489,683
Total Current Liabilities	777,323

Long-Term Liabilities

Notes payable	136,762
Less: Current portion included above	5,611
	131,151

Long-Term Obligation Under Capital Lease

Notes payable	5,212
Less: Current portion included above	3,816
	1,396

Fund Balances

Appropriated for public education	35,619
Appropriated for building maintenance	30,217
Unappropriated	3,503,923
	3,569,759

Total \$4,479,629

**Oklahoma State Medical Association
Schedule of Expenses**

	Year ended December 31,	
	1983	1982
JOURNAL Expenses		
Salaries	\$ 36,000	36,000
Advertising	13,517	17,452
Artwork	3,519	3,132
Printing	59,282	51,990
Proofreading	793	814
Supplies and other	<u>5,870</u>	<u>7,570</u>
Total Before Allocation of Overhead	118,981	116,958
Overhead allocated from general membership expenses	<u>18,833</u>	<u>23,963</u>
Total JOURNAL Expenses	<u><u>\$137,814</u></u>	<u><u>140,921</u></u>
Annual Meeting Expenses		
Exhibit expense	\$ 1,212	247
Travel	468	4
Special events	3,419	—
Planning	1,515	1,376
Printing	7,855	7,350
Speaker	3,888	3,610
Entertainment	4,017	728
Luncheon	348	321
Signs and security	1,478	785
Audio visual equipment	4,006	354
Sports activities	131	710
Hotel	42,215	21,686
Ladies activities	4,381	(140)
Other	<u>1,789</u>	<u>1,920</u>
Total Before Allocation of Overhead	76,722	38,951
Overhead allocated from general membership expenses	<u>29,182</u>	<u>26,842</u>
	<u><u>\$105,904</u></u>	<u><u>65,793</u></u>

**Oklahoma State Medical Association
Statement of Changes In Fund Balances
For The Months Ended March 31, 1984**

Appropriated For Public Education	
Beginning of period	\$ 35,619
Contribution from Central Oklahoma Council of Medical Staffs	<u>—</u>
End of period	<u>35,619</u>
Appropriated For Building Maintenance	
Beginning of period	30,217
Appropriation for period	<u>—</u>
End of period	<u>30,217</u>
Unappropriated	
Beginning of period	3,449,134
Excess of revenue over expenses	<u>54,789</u>
End of period	<u>3,503,923</u>
Total	<u><u>\$3,569,759</u></u>

**Report of the
COUNCIL ON LONG-RANGE
PLANNING AND DEVELOPMENT**

Reference Committee I

Subject: Annual Report
Presented by: John A. McIntyre, MD,
Chairman
Referred to: Reference Committee I

Introduction

The Council on Long-Range Planning and Development meets twice annually — in the fall to review the progress of the various councils on the annual program of activities adopted by the House of Delegates, and in the spring to review reports and resolutions that are to be submitted to the House. In both sessions we attempt to look at the long-range goals and objectives of OSMA and plan strategies for dealing with the many problems facing organized medicine.

In all honesty we must report that the latter is seldom achieved. The current problems are of sufficient magnitude to almost prohibit time for in-depth discussion of long-range problems. We realize the importance of dealing with long-range issues, but the council has not conceived a meeting format that permits much time for long-range planning. Consequently, this report details current and the immediate proposals of the councils, which are much more detailed in the individual reports.

A conclusion to which the House will obviously come is the tremendous contribution made to the

Oklahoma State Medical Association

**Statement of Revenues and Expenses
For The Months Ended March 31, 1984**

From Operations	
Revenue	\$192,133
Expenses	<u>145,893</u>
Excess of Revenue Over Expenses From Operations	<u>46,240</u>
JOURNAL	
Revenue	24,159
Expenses	<u>22,463</u>
Excess of Revenue Over Expenses From JOURNAL	<u>1,696</u>
Annual Meeting	
Revenue	15,500
Expenses	<u>2,662</u>
Excess of Revenue Over Expenses From Annual Meeting	<u>12,838</u>
Other Revenue (Expenses)	
Amortization of organization expense — Subsidiary	<u>(5,985)</u>
Net Excess of Revenues Over Expenses	<u><u>\$ 54,789</u></u>

Proceedings *(continued)*

association membership by the volunteer members of the various councils and committees. Literally thousands of hours are spent on association activities each year, most of them on Saturdays, Sundays, and at night, to maintain quality care for our patients and our existing high level of professionalism. The members are deeply indebted to the physician volunteers of the association.

Council Activities:

The Council on State Legislation proposes a continued program of monitoring health legislation at the State Capitol. Last year the council dealt with 32 bills. The council meets weekly or bi-weekly during the session. The council also proposes the creation of a Citizens' Council (see Report A of the Council on State Legislation.)

Budget Request \$15,700

The Council on Governmental Activities plans to continue its federal legislative activity, with the possibility of some increase in expenditures if the Medicare Demonstration Project receives legislative support.

Budget Request \$13,500

The Council on Professional and Public Relations plans to expand its current activities to accommodate increased student activity.

Budget Request \$25,000

The Council on Medical Education will continue its CME accreditation and certification program and will assist the State Regents for Higher Education in a study of physician manpower.

Budget Request \$2,000

The Council on Medical Services deals with many of the socioeconomic issues of medicine.

Budget Request \$1,500

Oklahoma State Medical Association

Schedule of Revenues

For The Months Ended March 31, 1984

From Operations

Membership dues	\$155,727
Interest and commissions	6,766
Building lease	8,080
Membership directory sales and advertising	6,522
Computer	1,845
Miscellaneous	13,193

Total Revenue from operations 192,133

From JOURNAL

Advertising and sales	<u>24,159</u>
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From Annual Meeting

Contributions	300
Exhibit fees	15,200

Total Revenue from annual meeting \$ 15,500

The Council on Member Services supports and promotes a wide range of direct benefits for members of the association,

Budget Request \$1,500

The Council on Public and Mental Health's important areas are perinatal, maternal, and child health.

Budget Request \$2,250

Oklahoma State Medical Association

Schedule of Expenses

For The Months Ended March 31, 1984

General Membership Expenses

Salaries	\$ 75,144
Awards	381
Councils	18,897
Depreciation and amortization of leased equipment	5,046
Dues and subscriptions	470
Equipment rental	8,257
Insurance	6,707
In-state travel	1,183
Interest	3,646
Legal and professional	300
Office supplies	4,779
Out-of-state travel and AMA convention	8,085
Payroll taxes	5,741
Postage and shipping	9,879
Repairs and maintenance	1,753
Services	641
Staff and officers	4,490
Telephone and utilities	7,047
Other general expense	4,286
Newsletter	<u>1,233</u>

Total Before Allocation of Overhead 167,965

Expense reimbursement from subsidiary (22,072)

Total General Membership Expenses 145,893

Council Expenses

Governmental activities	8,271
Professional and public relations	7,947
Planning and development	1,184
Medical education	(28)
Medical services	617
Member services	906

Total Council Expenses \$18,897

JOURNAL Expenses

Salaries	\$ 9,000
Printing	8,838
Advertising	2,105
Art Work	1,184
Proofreading	137
Operating	<u>1,199</u>

Total JOURNAL Expenses 22,463

Annual Meeting Expenses

Travel	10
Printing	1,965
Miscellaneous supplies	57
Entertainment	21
Audio visual equipment	<u>609</u>

Total Annual Meeting Expenses \$ 2,662

The Council on Hospital Medical Staffs is a proposed new council (see Report of the Council on Member Services).

Budget Request \$2,000

Council on Long-Range Planning and Development.

Budget Request \$5,100

TOTAL COUNCIL REQUESTS \$62,550

This is an informational report.

Respectfully submitted,

John A. McIntyre, MD

Chairman

George H. Kamp, MD

J. B. Eskridge III, MD

Elvin M. Amen, MD

R. L. Cornelison, Jr., MD

Larry L. Long, MD

Robert G. Perryman, MD

Michael J. Haugh, MD

Ken W. Whittington, MD

William O. Coleman, MD

John A. Blaschke, MD

M. Joe Crosthwait, MD

William R. Smith, MD

George W. Prothro, MD

Perry A. Lambird, MD

William L. Hughes, MD

Ed L. Calhoon, MD

Floyd F. Miller, MD

Victor L. Robards, Jr., MD

Orange M. Welborn, MD

William M. Leebron, MD

James B. Pitts, Jr., MD

Oklahoma State Medical Association

1984-85 Proposed Budget

<u>Income</u>	<u>Actual 1983</u>	<u>Projected 1984</u>
Membership Dues	\$587,444	\$595,000
Interest & Commissions	36,922	80,000
Lease Income	31,440	35,000
Directory Sales	20,766	15,000
Advertising	57,822	60,000
Subscriptions to <i>JOURNAL</i>	31,610	32,000
Annual Meeting	12,050	50,000
Contracts	100,000	100,000
Miscellaneous	5,226	5,000
Total	\$883,280	\$972,000

Oklahoma State Medical Association

<u>General Membership Expenses</u>	<u>Actual 1983</u>	<u>Projected 1984</u>
Salaries	\$281,050	\$326,000
Payroll Taxes	21,230	24,800
Pension Costs	25,783	27,900
Postage & Shipping	27,915	30,000
Office Supplies	17,028	20,000
Equipment Rental	33,085	33,000
Insurance	36,039	38,000
Staff & Officers	23,051	20,000
Telephone & Utilities	26,586	30,000
Legal & Professional	16,700	12,000
Interest	14,879	15,000
Repairs & Maintenance	4,512	6,000
Dues & Subscriptions	2,995	3,500
Council Programs	78,942	68,550
Out-of-State Travel	64,633	50,000
In-State Travel	2,845	4,000
<i>JOURNAL</i>	118,981	120,000
Annual Meeting	76,722	75,000
Awards	1,650	2,000
Depreciation	16,716	17,000
Services	3,574	2,800
Other General Expenses	8,826	7,500
Total	\$903,742	\$933,050

Report of the CONSTITUTION AND BYLAWS COMMITTEE

Reference Committee I

Subject: Annual Report

Presented by: Stanley R. McCampbell, MD,
Chairman

Referred to: Reference Committee I

Introduction

It is the duty of the Constitution and Bylaws Committee of the association to consider all amendments proposed by members of the association or by component county societies, to assure that the amendments are in proper form and that they do not violate other portions of the association's Constitution and Bylaws, and, at the same time, shall present to the House of Delegates recommendations regarding the adoption of proposed amendments.

The year your committee has been asked to consider two proposed amendments. The first calls for a change in the association's definition of "Affiliate Members" and the second creates a new association council to be known as the "OSMA Council on Hospital Medical Staffs."

The following phraseology has been considered by

Oklahoma State Medical Association

Projected Council Expenses 1984

Council on State Legislation	\$15,700
Council on Governmental Activities	13,500
Council on Professional and Public Relations	25,000
Council on Medical Education	2,000
Council on Medical Services	1,500
Council on Member Services	1,500
Council on Public and Mental Health	2,250
Council on Planning and Development	5,100
Council on Hospital Medical Staffs*	2,000
Total	\$68,550

*Proposed new council

Proceedings *(continued)*

the committee and found to be appropriate to make the changes that have been proposed.

At the end of this report your committee will make its recommendations regarding the adoption of these two proposed amendments.

Affiliate Members

The definition of "affiliate members" is found in Chapter 1, Section 2.04, of the OSMA Bylaws. The new or amendatory language underlined in the following will accomplish the expansion of the definition of affiliate members as recommended by the Association's Board of Trustees.

2.04 AFFILIATE MEMBERS. Affiliate members shall be those so classified by component societies or the Board of Trustees who are ineligible for regular membership, but meet one or more of the following classifications: (a) active members of other component associations of the American Medical Association; (b) active members of the Association who find it necessary to leave the state in order to engage in medical missionary, education, or philanthropic labors, are eligible for this classification of membership for periods of time related to individual circumstances as may be determined by the Board of Trustees; (c) dentists who hold the degree of DMD or DDS who are members of the American Dental Association and their state and local dental societies; (d) pharmacists who are active members of the American Pharmaceutical Association; (e) teachers of medicine or of the sciences allied to medicine who are citizens of the United States and are ineligible for active membership; and (f) individuals engaged in scientific endeavors allied to medicine and others who have attained distinction in their fields of endeavor but who are not eligible for other categories of membership. Petition for such election to membership must originate in a component society or the Board of Trustees. Approval of the petition by the Board of Trustees is necessary before the affiliate membership may be awarded.

OSMA Council on Hospital Medical Staffs

It has been recommended by the association's Council on Member Services and by a special ad hoc committee on Hospital Medical Staffs that a new council be created within the OSMA structure to be known as the "OSMA Council on Hospital Medical Staffs."

Your committee has approved the following language and current bylaws amendments to accomplish the creation of this new council.

Section 1.00 of Chapter IX is amended as follows (with amendatory language underlined):

Section 1.00 COUNCILS. The councils of the Association shall be: Council on Planning and

Development, Council on Member Services, Council on Medical Service, Council on Professional and Public Relations, Council on Governmental Activities, Council on Medical Education, Council on Public and Mental Health, and Council on State Legislation, and OSMA Council on Hospital Medical Staffs.

A new section 10.00 is inserted at the end of Chapter IX as follows:

Section 10.00 OSMA COUNCIL ON HOSPITAL MEDICAL STAFFS

10.01 DUTIES. The Council shall provide a means to address the relationship between members of the OSMA and Hospital Medical Staffs. It shall establish and maintain a communications liaison with organized Hospital Medical Staffs, shall develop policy recommendations regarding medical staff relations for consideration by the Association, and shall establish and maintain relations with federal and state government entities having statutory or regulatory jurisdiction affecting Hospital Medical Staffs. The council shall monitor and communicate to the OSMA, the activities of the Hospital Medical Staff Section of the American Medical Association.

Recommendations:

1. It is the unanimous recommendation of the members of the Constitution and Bylaws Committee that the amendments to the "Affiliate Members" Section of the bylaws *not be adopted*.

2. It is the unanimous recommendation of the Committee that the House of Delegates adopt the recommended language to create the new "OSMA Council on Hospital Medical Staffs."

Respectfully submitted,
Stanley R. McCampbell, MD,
Chairman

David Browning, Jr., MD
Raymond L. Cornelison, Jr., MD
James B. Eskridge III, MD
Jerold D. Kethley, MD
C. S. Lewis, Jr., MD
Larry L. Long, MD
Floyd F. Miller, MD
Arnold G. Nelson, MD
J. B. Wallace, MD

THE PHYSICIANS LIABILITY INSURANCE COMPANY ANNUAL REPORT FOR 1983

Physicians Liability Insurance Company completed four years of operations on December 31, 1983. Your company's strong performance in professional liability and medical and dental insurance proved again last year that these lines, thought to be unmanageable to much of the commercial insurance industry, can be written successfully and economically

with a good plan and alert supervision.

As important as a significant savings from these two coverages are to Oklahoma physicians (approximately \$6,000,000 a year), the example of a successful insurance program and a company writing these two "difficult lines of insurance" with success is perhaps even more important to the medical profession. To a great degree, the cohesiveness, unity and strength of the Oklahoma State Medical Association have contributed to this important example of continuing success.

On January 1, 1984, PLICO effected a 15% increase in the cost of its professional liability coverage. The primary purpose of the increase was to pay higher reinsurance costs produced by a tightening insurance market. The Oklahoma State Medical Association has watched these cycles in the professional liability insurance and reinsurance areas over the years. This year, \$1,500,000 was recovered by your Association as the legacy of one of these difficult times (1974/75). Even though the loss experience of PLICO continues to be good, the price of PLICO's professional liability coverage must remain adequate to maintain a strong and stable market for state physicians and to be financially prepared for the deferred claims development which is uniquely a part of professional liability insurance.

PLICO's 1984 professional liability premium increase is the first increase in cost to Oklahoma physicians for professional liability in the five years of PLICO's existence. Meanwhile your Association has preserved the integrity of the plan and enabled this vital OSMA insurance activity to establish and sustain an unparalleled national record of the lowest premium rates for the highest quality "occurrence" type insurance coverage. State physicians have never had to accept the less desirable "claims made" form of insurance protection, thanks to PLICO.

PLICO experienced a cash surplus for 1983, but this money was dedicated to set up reserves against "incurred but not reported" losses which will defer taxation until such time as it can be established that no liabilities will impact against this surplus.

PLICO's professional liability insurance program provides quoted coverage limits up to \$5,000,000 per claim throughout all risk classes, and even higher limits of protection are available on an individual basis.

More than 37 employees of the management company work regularly for PLICO and answer to the Board of Directors whom your OSMA House of Delegates elects each year. These people provide the day-to-day services that are essential to the operation of an insurance company which has now become the fifth largest casualty insurance company in the State of Oklahoma with mature claims activity in two significant areas of insurance coverage.

Your Board personally supervises the activities of management company personnel through its committees and reviews their efforts, setting the standards of performance which the management company is required to meet and which they have consistently attained.

The PLICO Board convenes six times a year. Committees of the Board meet more frequently, expending in 1983 a total number of 600 man hours in

reviewing the operations of the company and setting policy and direction in the many areas where the Board responsibility extends.

In 1983, the management company provided over 30,000 hours of manpower in attending to the miscellaneous operations of PLICO.

PLICO Health

Your company's major medical/medicare supplement plan and dental care option (all parts of *PLICO Health*) offer broader benefits, more generous payment allowances and vastly more economical premium rates than any of PLICO's competitors.

Collective savings experienced by PLICO's 7,500 policyholders and their 14,000 dependents can be estimated at approximately \$3,500,000 over the last two years, and will be even more this year. The Board elected to increase PLICO's premiums by 15% in September, 1983. Additionally, the minimum deductible was increased from \$100.00 to \$200.00 on January 1, 1984. Both steps were direct responses to loss experience. It appears that the adjustments in premium have corrected the situation which produced a deficit during the 1982/83 period, and yet *PLICO Health* remains the most economical health insurance option available anywhere.

If the favorable trend continues, *PLICO Health* should be able to sustain the present premium levels and deductibles for some time to come, which demonstrates that this type of insurance coverage can not only be made manageable, but may also be written on an economical basis.

PLICO Health's Wellness Bonus was dropped in 1984 because its cost did not justify its existence. Handling was expensive. Furthermore, a sophisticated audience was able to determine when it was advisable to take the bonus or file a claim. Its value proved significant in the over 65 group, however, and PLICO's medicare supplement insureds may continue to earn the \$150 bonus if they are able to avoid filing claims during an annual policy period.

PLICO, through the Wellness Bonus, provided a laboratory for an important proposal and the viability of the wellness concept was established for insureds in the upper age brackets, but also it is equally apparent that less permanent type employees are not influenced by this inducement to avert the filing of claims.

The company's health insurance line of business is managed by a committee of PLICO's Board of Directors whose members are Eugene Feild, MD, Chairman; David Bickham, OSMA Executive Director; C. Alton Brown, MD; Billy R. Goetzinger, MD; Ray V. McIntyre, MD; John R. Alexander, MD; Kenneth W. Whittington, MD; Floyd F. Miller, MD; and Wayne Coventon, Clinic Managers Association.

Reinsurance Consideration

A soft reinsurance market enjoyed by PLICO in the first years of its existence in the professional liability area is cycling into a hard market with higher costs. Accident and Health reinsurance costs have been consistently high and we look to this mar-

Proceedings *(continued)*

ket to stabilize and then slip the other way. However, rising reinsurance costs may precipitate nominal premium increases in the foreseeable future. The effect on individual insureds will be significantly diluted, however, because the financial strength of PLICO has enabled the company to directly retain a large share of the front-end loss exposure, thereby reducing the effect of reinsurance increases.

PLICO's professional liability program is reinsured by the General Reinsurance Corporation. The high-limit risk exposures of our health insurance programs are protected by Lincoln National Insurance Company of Fort Wayne, Indiana. Both of these companies are A + XV companies in Bests Insurance Guide.

Low Overhead

Each year PLICO's Board of Directors has made a comparative study of the overhead costs reported by commercial carriers in medical society owned companies. This has revealed that PLICO's management cost — only 10.6% of the premium dollar — is lower than that of the most efficient captive companies owned by doctor groups and far less than the average 23.6% to 30% charged by commercial carriers. PLICO's management cost is more than fully funded by the investment income from reserves, surplus and capital, making more than 100 cents of every premium dollar available for the payment of claims and claims defense.

Market Share

PLICO's professional liability insurance program has been accepted with virtual unanimity by members of the Oklahoma State Medical Association and other practicing physicians in Oklahoma. The *PLICO Health* product has reached an enrollment of 2,289 physicians — over 60% of the total available market. In addition, 5,216 physicians' employees are insured by *PLICO Health*. When spouses and dependent children are considered, about 21,000 persons are protected by *PLICO Health*. This high level of participation has contributed significantly to the low cost of the program.

Financial Condition

The net earned premium in 1983 for professional liability was \$7,215,407. Assets at year end were \$22,476,154 — up \$4,502,832 from 1982. *PLICO Health* produced about \$6,708,471 of total premium income over a 12-month period ending December 31. An operating loss of \$481,878 for the year is attributable to *PLICO Health* utilization experience, a situation now being corrected by increased premium income, by a higher front-end deductible, and by a material reduction in the expense of the "Wellness Bonus".

Claims Picture

In 1983, 54 professional liability claims were paid.

The net cost of these claims attributed directly to PLICO was \$1,365,944. The management company established 477 claims files and researched 625 claims during the year, utilizing the services of four professional liability adjusters, 15 highly qualified professional liability attorneys and three claims clerks who were especially qualified and screened to handle professional liability claims. For the four-year period of 1980-1983, your company paid out a total of \$6,668,212, but \$2,729,117 of this loss was borne by our reinsurance company. Actual 1980/83 premium reserves were set up by the management company on behalf of PLICO for unpaid claims in the amount of \$10,582,097 as of December 31, 1983. When reserves against "incurred but not reported" claims are considered, the total reserves established by PLICO for the four-year period are \$14,736,498.

The management company of PLICO also employs four highly qualified adjusters to pay *PLICO Health* claims. A total of 27,000 claims were processed, reviewed and paid on behalf of our 21,000 insureds. The turnaround time for these claims was an average of seven working days — a record time in the accident and health business which is roughly one-fourth of the time required by the best commercial carriers and clearly faster than other prepaid plans in the marketplace. This swift processing has saved many arguments and much loss-of-time in the payment of claims for physicians and their employees. With physicians' time as valuable as it is, this savings alone, although incalculable in hard numbers, may well run into millions in any given year. PLICO is proud that it has been able to secure this quality of swift and fair service from the management company.

As a result of the maturation of PLICO's professional liability program, the claims activity has reached a relatively constant level for the year 1983, yet the operation continues to occupy much of the efforts and activities of management company personnel.

The Claims Committee which works with many different personnel in decisions involving defense settlement negotiations and trial of claims are John A. McIntyre, MD, Chairman; Ed L. Calhoon, MD; James B. Eskridge III, MD; Eugene G. Feild, MD; Billy R. Goetzinger, MD; Edward K. Norfleet, MD and Billy D. Dotter, MD.

Return on Investment

PLICO's Investment Committee, comprised of C. S. Lewis, Jr., MD; David Bickham, and Edward Soule, LLB, reports investment income of \$2,207,552, up \$123,760 from 1982. These earnings represent a return on investment of 11.5%. Investments have been increasingly placed in A-rated corporate bonds, as the need for liquidity is reduced by the increase in reserves carried by your corporation. Guaranteeing long term high interest rates is now becoming a significant consideration of the Committee. Investment income utilized in company operations more than offsets the management fee, leaving more than 100 cents of every premium dollar available for claims and defense costs. Nowhere else can you get back more than you pay in, in terms of benefits and insurance value.

There has been no additional recovery from PLICO's deposits in the Penn Square Bank, so the 20% recovery from the F.D.I.C. which was previously reported leaves a balance of \$488,746.85. Recovery of this amount is hoped for in the future, but the company has made provisions for operating indefinitely without these funds.

Loss Prevention

The company's Loss Prevention Committee, chaired by Ray V. McIntyre, MD, has been particularly active and effective in 1983. Regional Loss Control Seminars, held this year attracted a registration of more than 600 physicians, all of whom received a 5% professional liability insurance premium discount. The committee has carefully analyzed loss experience and has recommended special consent forms and protocols for investigational procedures. A study of neo-natal costs and risks has been completed and recommendations were made to an adhoc committee of the Oklahoma State Medical Association which is studying the same subject. Other members of Doctor McIntyre's committee are: David Bickham; Ed L. Calhoun, MD; Floyd Miller, MD; William M. Leebron, MD; and David M. Selby, MD.

1984 Plan

Your Board of Directors, with the help of PLICO's management firm, will continue to strengthen the company's financial position and run this growing operation. Your Board will rely heavily on the continued unanimous support of the OSMA membership. As management responsibility increases in proportion to the size of the company and the maturation of the professional liability and health insurance programs, the Board intends to continue to get more than 100 cents worth of value for every dollar of premium you pay.

In order to provide quicker *PLICO Health* claims service, faster policy issuance, and improved statistical data about the PLICO's professional liability program, your management company expanded its data processing capability significantly with the installation of two computers dedicated to handling the large-volume health insurance business and refining the quality of professional liability reports which can be produced. The refinement and up-dating of these services will continue to receive a high priority in 1984. At the present level of development, the system already enables PLICO's Loss Prevention and Underwriting groups to evaluate loss experience via an infinite variety of computer generated studies. It also facilitates efficient policy issuance and greatly reduces the time required to pay *PLICO Health* claims.

Your Officers and Directors believe that PLICO has more than fulfilled its promise to the members of the Oklahoma State Medical Association by providing over a dollar's worth of value for every premium dollar invested. This has been possible through the willingness of the members of the Oklahoma State Medical Association to pull together as a unit with a common purpose and common goals. PLICO's premium savings have reduced physicians' overhead expense and, in turn, have contributed to a moratorium in the

rising costs of health care. Your company has also demonstrated the viability of two types of insurance which nationally have enjoyed less than favorable consideration from commercial insurance carriers. PLICO's Board of Directors has succeeded in these endeavors with the help of C. L. Frates and Company, and has been reinforced by the strength of the Association membership — all pulling together. Your Board seeks to continue to merit your undivided support in the years to come.

PHYSICIANS LIABILITY INSURANCE COMPANY BALANCE SHEET December 31st

ASSETS	1983	1982
Cash	\$ 1,224,571	\$ 948,567
Investments	21,043,537	16,942,142
Premiums Receivable	56,932	82,126
Interest Receivable	327,081	280,377
Other	—	25,577
	<u>\$22,652,121</u>	<u>\$18,278,789</u>

LIABILITIES AND STOCKHOLDERS' EQUITY

LIABILITIES		
Unearned Premium	\$ 1,576,121	\$ 1,463,209
Losses and Loss Adjustment		
Expenses	16,510,751	11,914,441
Reinsurance Premium Payable	920,309	797,603
Commissions Payable	109,119	103,885
Management Fee Payable	430,597	370,549
Deferred Income Taxes	—	42,000
	<u>\$19,546,897</u>	<u>\$14,691,687</u>
STOCKHOLDERS' EQUITY		
Common Stock	\$ 150,000	\$ 150,000
Additional Paid-In Capital	3,350,000	3,350,000
Retained Earnings	(394,776)	87,102
	<u>3,105,224</u>	<u>3,587,102</u>
TOTAL STOCKHOLDERS' EQUITY	<u>\$22,652,121</u>	<u>\$18,278,789</u>

STATEMENT OF OPERATIONS December 31st

REVENUES	1983	1982
Net Premiums Earned	\$13,923,861	\$ 9,475,204
Investment Income	2,207,552	2,083,792
	<u>\$16,131,413</u>	<u>\$11,558,996</u>
EXPENSES		
Losses	\$13,782,634	\$ 9,009,136
Loss Adjustment Expenses	437,288	296,737
Operating Expenses	2,435,369	1,767,386
Loss on Investment	—	305,467
	<u>\$16,665,291</u>	<u>\$11,378,726</u>
Income (Loss) Before Taxes and Extraordinary Income	\$ (523,878)	\$ 180,270
TAXES ON INCOME (CREDIT)	(42,000)	67,000
NET INCOME (LOSS) BEFORE EXTRAORDINARY CREDIT	<u>\$ (481,878)</u>	<u>\$ 113,270</u>
EXTRAORDINARY CREDIT	—	25,000
NET INCOME	<u>(481,878)</u>	<u>\$ 138,270</u>
DEFICIT, BEGINNING OF YEAR	87,102	(51,168)
RETAINED EARNINGS	<u>\$ (394,776)</u>	<u>\$ 87,102</u>

**Report of the
OKLAHOMA
STATE MEDICAL ASSOCIATION
AUXILIARY**

Reference Committee I

Subject: Annual Report
Presented by: Mrs Camille Harrison, President
Referred to: Reference Committee I

A year ago, we announced that 1983-84 was going to be a FULL STEAM AHEAD auxiliary year. It surely has been exactly that. It has been a very successful year filled with many accomplishments. Our focus for the year has been Children and Youth, in line with our AMA Auxiliary focus, with special emphasis on drug abuse in young people.

Last September the auxiliary expanded its fall board meeting to a two-day meeting involving the entire membership. The reason for this was to give more Oklahoma auxiliaries an opportunity to hear a program similar to our AMA Auxiliary Confluences held in Chicago, which only 7-8 of us each year attend. We wanted to present a program which could be used by the county auxiliaries in their own communities.

With the financial assistance of the OSMA we were able to have Dr Marsha Keith Schuchard speak to us on "The Family vs the Drug Culture." Dr Schuchard was a 1982 AMAA Confluence speaker. Our luncheon program was a puppet show, "Keep off the Grass," by the PROs (Puppets Reaching Others), a Chickasha church group. Our "Confluence '83" was held at the lovely Park Suite Hotel in Oklahoma City. The meeting was a huge success, with over 150 people attending. The support and promotion of the meeting in the community by the county auxiliaries made the difference in attendance. Several counties invited school personnel to attend and provided lunch and transportation.

A very definite strengthening of the bond between our state and county organizations was a result of the confluence. Two of our county auxiliaries have had fund raisers and donated the proceeds to school systems for drug abuse education or to organizations directly involved with drug abuse prevention. All our auxiliaries have had some type of project concerned with prevention of abuse of drugs. The response to a questionnaire distributed at the conclusion of the meeting indicated a unanimous desire to have this type of meeting again.

Our new beautiful membership brochure was unveiled in January. This is a "first" for OSMAA. The brochure was a result of several months' research by our first and second vice-presidents. This will be an excellent membership tool to renew, recruit, and retain members.

We have reached an all time high for AMA-ERF! We have surpassed the goal of \$25,000 set by our chairman and still have our Holiday Bazaar at Shaugri-La. We will be distributing checks at the annual

meeting to Oklahoma medical schools totaling \$27,340.01!

February is traditionally the month for our Legislative Day, and this year was no exception. "The Changing Face of Medicine 1984" was the title chosen by our co-chairmen for this outstanding program. Fortunately, the weather was beautiful, and we had a record attendance.

Our new organ donor awareness prints were ready for distribution mid-April. The print is one designed by Julie Blackstone, a Shawnee auxilian. We had enough printed for every tag agency in the state. We are requesting the print be framed by the county auxiliary or member-at-large so it will hold a permanent place on the wall of the tag agency.

I have felt very proud as I have traveled across Oklahoma this past year to eleven of our sixteen county auxiliaries and heard their reports on activities. Their community health projects have been outstanding. They have worked hard for AMA-ERF and the Nurses' Loan Fund. They have become more involved in legislation, honored their spouses, and had fun on Doctors' Day. Whatever we accomplish depends on the county members. The county is where the work is done.

Our membership stands at 1,372 — an increase of 45 members from last year. The majority of the increase in members is in resident physician and medical student spouses.

I want to express appreciation to my family who have supported me so wonderfully. As many of you know, I have involved each one. They have done art work for me, listened to speeches, corrected articles I have written, given advice, shared the frustrations, and celebrated with me when events went as planned. I especially want to thank my husband who has patiently tolerated my total involvement with auxiliary this past year. I also appreciate the many hours he spent developing and printing auxiliary pictures for me and running the projector for Dr Schuchard's presentation.

I would also like to thank the association for the support we have received the past year. In addition to assisting the auxiliary financially at our "Confluence '83," the OSMA sent our community health chairman to Chicago to attend the AMA Seminar, "The Impact of Lifestyles on Child and Adolescent Health." OSMA also paid for our legislative co-chairman to attend an AMA health legislation workshop in San Diego. We have experienced increased teamwork between the OSMA and the OSMAA this past year — certainly, one of our important goals, because we can do more together. *Our futures depend on it!*

This has certainly been a wonderful year for the Oklahoma State Medical Association Auxiliary and for me personally. I thank each auxilian and physician for this. I have felt deeply honored to be their president. I have worn my president's pin with great pride.

Thank you.

SPECIAL REPORT

Reference Committee I

Subject: OSMA Auxiliary
Presented by: John W. Records, MD, and
George H. Garrison, MD
Referred to: Reference Committee I

The first Women's Auxiliary to any medical organization was the Pottawatomie County Auxiliary formed in April, 1907 at Shawnee, Oklahoma, with the purpose of "promoting friendly relations among physicians' wives and to foster the interests of the medical profession."

When the group met to discuss plans for entertaining the visiting physicians' wives at the annual meeting in Shawnee of the newly formed Oklahoma State Medical Association in May, they decided to send invitations to all physicians' wives in the state to come to this meeting to consider forming a state auxiliary. This was formally done May 15, 1907 as the Women's Auxiliary to the Oklahoma State Medical Association with essentially the same stated purpose as the Pottawatomie County group.

The Pottawatomie County Auxiliary set out immediately to fulfill its purpose by meeting together, becoming better acquainted and more friendly. Very soon they established an "Emergency Closet" with sickroom supplies for people who could not afford to buy them.

In the following years, with more county auxiliaries and increased numbers of members, their objectives included self-education in community needs in health problems and joining other organizations to assist in their health programs and volunteering in charitable agencies.

The first Oklahoma State Auxiliary ceased to function in 1916. A national auxiliary was organized in St Louis, Missouri, in 1922.

In 1925 Mrs E. P. Allen and 45 other physicians' wives reorganized as the Women's Auxiliary to the Oklahoma State Medical Association with basically the same objectives and purposes as adopted by the first auxiliary in 1907.

The Auxiliary demonstrated its ability to function as a public relations body for the medical association.

From the mid-1930s until the Wagner-Murphy-Dingall bill was finally defeated, it was necessary for the auxiliary members to educate themselves to the hazards of socialized medicine and transmit that information to the public. It was then that public relations and a knowledge of the effect of legislative activities on the future of the practice of medicine became more seriously pursued.

In 1948 the Auxiliary established a Nurses Loan Fund for students in training which continues to operate very effectively.

When in 1952 the AMA-ERF (American Medical Association Educational and Research Foundation) was approved as a very practical means of raising money to aid medical students and medical colleges

nationally, the state auxiliary elected to join this effort. It has been very successful in enabling the auxiliary in 1983 alone to contribute \$25,200 to the University of Oklahoma for this purpose.

The strength of the state auxiliary lies in the spirit of cooperation of the members of each county group and the willingness of all members to give of their time, talents, and enthusiasm to fulfill the complete purpose of the auxiliary to the Oklahoma State Medical Association.

(Please see Resolution #13.)

Respectfully submitted,
John W. Records, MD
George H. Garrison, MD

Oklahoma State Medical Association House of Delegates

Resolution: 2
(Not adopted)

Introduced by: Cleveland-McClain County
Medical Society
Subject: Outpatient Psychiatric Coverage
Referred to: Reference Committee I

WHEREAS, Psychiatric care is a basic and essential part of medical care; and

WHEREAS, PLICO does not provide for the payment of outpatient psychiatric services; and

WHEREAS, The House of Delegates is the official representative body of the OSMA membership; now therefore be it

Resolved, That the House of Delegates hereby instructs the Board of Directors of PLICO to modify its PLICO Health policy to include coverage for outpatient psychiatric services, and be it further

Resolved, That the coverage become effective on the anniversary of the first policy due for renewal in 1985.

Oklahoma State Medical Association House of Delegates

Substitute Resolution
(Adopted)

Introduced by Committee I
Subject: Outpatient Psychiatric Coverage
Referred to: OSMA House of Delegates

Resolved, That the House of Delegates hereby requests the Board of Directors of PLICO to study its PLICO Health policy in regard to possible outpatient psychiatric coverage.

Proceedings *(continued)*

American Medical Association House of Delegates

Resolution: 5
(Adopted)

Introduced by: Oklahoma Delegation
Subject: Late Resolutions
Referred to: Reference Committee I

Resolved, That it is the sense of this House:

- a) That the Board of Trustees and the Councils be commended for the quality and timeliness of the reports submitted to the House; and
- b) That those organizations and sections privileged by the rules of the House to submit business after the general deadline for resolutions be encouraged to exercise restraint in the number of items submitted; and
- c) That all resolutions, and in particular resolutions submitted following the general deadline, be accompanied by thoughtful fiscal notes; and
- d) That AMA Staff be encouraged to provide special support to the Hospital Staff, Medical Students, and Residents Sections so that they may have ready access to existing AMA policy; and
- e) That this resolution be communicated to all organizations and sections whose resolutions were not included in the 1984 Annual Meeting Delegate's Handbook mailed to members of the House of Delegates.

Oklahoma State Medical Association House of Delegates

Resolution: 10
(Adopted as amended)

Introduced by: Oklahoma Delegation to AMA
Subject: Potential Effect of Federal Legislation
Mandating Extended Fee Freeze on
Voluntary Freeze
Referred to: Reference Committee I

WHEREAS, The physicians of the American Medical Association and of numerous State Medical Associations, including the Oklahoma State Medical Association, have strongly supported the voluntary one-year freeze of their fees, requested by these Associations; and

WHEREAS, the Congress of the United States may consider legislation encompassing mandatory assignment for Medicare beneficiaries coupled with a one-year to two-year freeze of fees, beginning June 30, 1984, depending on the intention of the individual physician to accept or not accept assignment in 100% of his Medicare patients; and

WHEREAS, This legislation, if enacted, would lengthen the physician fee freeze far beyond the dates intended by the respective Associations, potentially as late as July 1, 1986; now therefore be it

Resolved, That in the event of enactment of such onerous legislation as the mandatory assignment amendment, the Oklahoma State Medical Association may immediately rescind the voluntary fee freeze, in the interest of appropriate individual fee adjustments, if desired, in anticipation of the effects of inflation and other factors during the mandatory fee freeze period.

Oklahoma State Medical Association House of Delegates

Resolution: 11
(Withdrawn)

Introduced by: Oklahoma Delegation to the AMA
Subject: Potential Effect of Federal Legislation
Mandating Extended Fee Freeze on
Voluntary Freeze
Referred to: Reference Committee I

WHEREAS, The physicians of the American Medical Association and of numerous State Medical Associations, including the Oklahoma State Medical Association, have strongly supported the voluntary one-year freeze of their fees, requested by these Associations; and

WHEREAS, The Congress of the United States has enacted legislation encompassing mandatory assignment for Medicare beneficiaries coupled with a one-year to two-year freeze of fees, beginning June 30, 1984, depending on the intention of the individual physician to accept or not accept assignment in 100% of his Medicare patients; and

WHEREAS, This legislation will lengthen the physician fee freeze far beyond the dates intended by the respective Association, potentially as late as July 1, 1986; now therefore be it

Resolved, That the Oklahoma State Medical Association immediately rescind the voluntary fee freeze, in the interest of appropriate individual fee adjustments, if desired, in anticipation of the effects of inflation and other factors during the mandatory freeze period; and be it further

Resolved, That the American Medical Association be petitioned, by similar resolution, to terminate forthwith its voluntary fee freeze.

Oklahoma State Medical Association House of Delegates

Resolution: 13
(Adopted)

Introduced by: John W. Records, MD, and
George Garrison, MD
Subject: OSMA Auxiliary
Referred to: Reference Committee I

WHEREAS, The Oklahoma State Medical Association Auxiliary has remained true to its original pur-

pose of assisting the medical profession and the people of Oklahoma to develop the best possible medical services; and

WHEREAS, It has repeatedly assisted in medical public relations; and;

WHEREAS, It was the founder of the Student Nurses Loan Fund in 1948; and

WHEREAS, Since 1952 the auxiliary has efficiently directed the course of the AMA-ERF (American Medical Association Educational and Research Fund) in Oklahoma; and

WHEREAS, The support from the Auxiliary has been in many other areas; now therefore be it

Resolved, That the Oklahoma State Medical Association hereby recognizes and is deeply appreciative of the pioneering spirit of the Auxiliary and the innumerable services it has rendered to the physicians and to the State of Oklahoma. May it long continue.

Oklahoma State Medical Association House of Delegates

Resolution:14
(Not adopted)

Introduced by: Council on Medical Services
Subject: Expanding PLICO into the Area of Contract Medicine

Referred to: Reference Committee I

WHEREAS, Costs of medical care continue to escalate at a pace consistent with other segments of the economy in the United States, and there is a growing concern with the cost of health care; and

WHEREAS, The media and Congress seem increasingly inclined to single out health care costs as the major factor of the inflationary burden; and

WHEREAS, Federal agencies, insurance companies, hospitals, and other health-related groups are developing and marketing prepaid medical plans which theoretically are designed to reverse the trend of increasing costs; and

WHEREAS, Physicians in Oklahoma find themselves assailed from all sides with a variety of newly developed contract medicine options, eg Prudent Purchaser Options, Health Maintenance Organiza-

tions, and Independent Practice Associations; and

WHEREAS, Physicians find themselves uncertain as to the most appropriate course to follow and the most beneficial type of contract to sign; and

WHEREAS, For a variety of reasons, physicians do not have complete trust or confidence in the motives and intentions of many third-party promoters of contract medical plans; now therefore be it

Resolved, That the Oklahoma State Medical Association, through its House of Delegates, urges the Physicians Liability Insurance Company (PLICO) to consider developing as rapidly as possible competitive health insurance programs that would be marketed in contractual relationships with hospitals and physicians and that would present the opportunity for physicians in the State of Oklahoma to enter into such contracts in the state of trust and harmony between PLICO and the said physicians of the Oklahoma State Medical Association; and be it further

Resolved, That because of the unique position that PLICO holds, ie having the best interest of patients, as well as the best interest of physicians in mind, there is an excellent opportunity for PLICO to fill the creative leadership and idealistic role in providing health care financing at a reasonable cost in a fair and honorable manner.

Oklahoma State Medical Association House of Delegates

Substitute Resolution
(Adopted)

Introduced by: Reference Committee I
Subject: Expanding PLICO into the Area of Contract Medicine

Referred to: OSMA House of Delegates

Resolved, That the Oklahoma State Medical Association, through its House of Delegates, urges the Physicians Liability Insurance Company (PLICO) to study the feasibility of a competitive health insurance program that could be marketed in contractual relationships with hospitals and physicians in the State of Oklahoma, and with the same degree of trust and harmony that exists between PLICO and the said physicians of the Oklahoma State Medical Association.

Report of REFERENCE COMMITTEE II

Presented by: Lanny F. Trotter, MD, Chairman

Mr Speaker and Members of the House of Delegates:

Reference Committee II gave careful consideration to the several items referred to it and submits the following report:

(1) Report of the Council on Public and Professional Relations

Recommendation:

Mr Speaker, your Reference Committee commends the council on effectively carrying out those duties which were assigned to it last year and recommends that the Report of the Council on Public and Professional Relations be adopted.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(2) Report of the President

Recommendation:

Mr Speaker, your Reference Committee would like to express its appreciation and deepest gratitude for the excellent leadership that George H. Kamp, MD, has provided throughout the past year and we recommend that the Report of the President be filed for information.

Mr Speaker, your Reference Committee recommends that this portion of the Report of the President be filed for information.

(3) Report of the President-Elect

Recommendation:

Mr Speaker, your Reference Committee recommends that the Report of the President-Elect be filed for information.

Mr Speaker, your Reference Committee recommends that this portion of the Report of the President-Elect be filed for information.

(4) Report of the Council on Public and Mental Health

Recommendation:

Mr Speaker, your Reference Committee considered the Report of the Council on Public and Mental Health and would like to express its appreciation for a job well done and recommends that the report be adopted with the following changes:

On page 2, line 5, Section B, after the title "Maternal Mortality Committee," delete lines 5 through 7 and insert "The annual report is attached for your information."

On page 2, line 18, after the word "report," delete the remaining portion of that paragraph through line 22 and insert the following:

The task force deserves special commendation for its efforts in developing a comprehensive plan for perinatal care.

It is recommended that the Oklahoma State Medical Association support Governor George Nigh's plan to create by executive proclamation an advisory committee on perinatal care in Oklahoma and that the advisory committee work with the State Department of Health, the OSMA, and the private sector in developing a financing and implementation plan for perinatal care in the state.

(5) Report of the Council on Medical Education

Recommendation:

Mr Speaker, your Reference Committee would again like to express its appreciation for the exceptional manner in which the council conducted its activities for 1983 and recommends that the Report of the Council on Medical Education be adopted.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(6) Report of the JOURNAL of the Oklahoma State Medical Association

Recommendation:

Mr Speaker, your Reference Committee would like to commend the OSMA Journal and its editorial staff for again publishing one of the most respected medical journals in America and recommends that the Report of the Journal of the Oklahoma State Medical Association be adopted.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(7) Resolution 1 — Viet Nam Veterans

Recommendation:

Mr Speaker, your Reference Committee recommends that Resolution 1 be adopted.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(8) Resolution 6 — Cognitive Services Reimbursement

Recommendation:

Mr Speaker, your Reference Committee heard extensive testimony concerning the inequities in reimbursement to physicians for diagnostic evaluation as compared to therapeutic management and your Reference Committee strongly recommends that Resolution 6 be adopted.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(9) Resolution 8 — Excess Supply of Physicians

Recommendation:

Mr Speaker, your Reference Committee heard extensive testimony concerning this subject and in light of the Report of the Council on Medical Education concerning the forthcoming study of physician manpower in Oklahoma by the higher regents, your Reference Committee feels no strong action should be prescribed until the results of the study are shown. However, Resolution 8 calls on the American Medical Association to take a leadership role in a multi-disciplined coalition to arrive at conclusions about physician manpower needs in our country. While the Reference Committee does not necessarily endorse the specific resolves of the resolution, we feel that it should be advanced to the American Medical Association. Therefore, Mr Speaker, your Reference Committee recommends adoption of Resolution 8.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(10) Resolution 15 — Support For Prudent Negotiations of Practice Contracts

Recommendation:

Mr Speaker, your Reference Committee recommends that Resolution 15 be adopted with the following change:

On page 2, line 2, delete the word "beneficial" and insert the word "appropriate."

Mr Speaker, your Reference Committee recommends adoption of this portion of the report as amended.

(11) Resolution 16 — Hazards of Smoking

Recommendation:

At the request of the author, the percentages on line 7 should be changed from "35-40%" to "30-35%."

Resolution 16 addresses the hazards of cigarette smoking and the ravages of cancer on people who smoke. It encourages physicians to spend extra time and in the words of the author, "at least 60 seconds," in discussing these hazards. Based on testimony of the author and others, direct communication from a physician to a patient is the best way to instill a motivation to stop smoking. Therefore, your Reference Committee recommends that no time limit be placed on the "extra time" that is to be allowed for informing patients and that the resolve be amended to read as follows:

Resolved, That the Oklahoma State Medical Association House of Delegates hereby encourages all physicians to schedule extra time to explain the extreme health hazards of smoking to their cigarette smoking patients; and be it further

Mr Speaker, your Reference Committee recommends that Resolution 16 be adopted as amended.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report as amended.

(12) Resolution 18 — Smokeless Tobacco (Snuff and Chewing Tobacco)

Recommendation:

Mr Speaker, your Reference Committee considered the testimony concerning Resolution 18 and would like to recommend changing the wording to add two resolves but not change the intent of the resolution.

On ~~line 21~~, page 2, line 4, after the word "cigarettes," change the punctuation to a semicolon (;) and add "be it further" and make the remaining portion of the sentence a third resolve which will read:

Resolved, that Oklahoma physicians make every effort to discourage the use of smokeless tobacco, and be it further

Your Reference Committee would also like to recommend that a fourth *Resolve* be added as follows:

Resolved, that this resolution be submitted to the House of Delegates of the American Medical Association.

Mr Speaker, your Reference Committee recommends that Resolution 18 be adopted as amended.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report as amended.

(13) Resolution 19 — Commendation of Edward K. Norfleet, MD

Recommendation:

Mr Speaker, your Reference Committee would like to take this opportunity to express its appreciation on behalf of the Oklahoma State Medical Association for the faithful service to both Tulsa County Medical Society and the Oklahoma State Medical Association that Dr Norfleet has provided for so many years and would like to thank the Tulsa County Medical Society for its thoughtfulness in this matter and recommends that Resolution 19 be adopted and that an appropriate plaque be presented.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

Mr Speaker, Reference Committee II recommends adoption of this report as a whole.

Mr Speaker, this concludes the Report of Reference Committee II. Your Reference Committee wishes to thank all who participated in the hearing and contributed to the preparation of this report.

Respectfully submitted,
Lanny F. Trotter, MD, Chairman
Gary G. Evans, MD
Charles R. Gibson, MD
David M. Selby, MD
Mary Anne McCaffree, MD
Ralph W. Richter, MD
Harold Smith, MD
Rick Ernest, Staff
Susan Meeks, Staff

Report of the COUNCIL ON PROFESSIONAL AND PUBLIC RELATIONS

Reference Committee II

Subject: Annual Report

Presented by: M. Joe Crosthwait, MD,
Chairman

Referred to: Reference Committee II

Introduction:

The Council on Professional and Public Relations is responsible for the internal and external communications program of the Oklahoma State Medical Association. The overall goals of the council are (1) to improve and maintain communication and understanding among Oklahoma physicians, their patients, and the public, and (2) to keep members informed about programs, policies, and activities undertaken by the association and by other organizations affecting the practice of medicine in Oklahoma.

Review of Activities:

During the past year the public relations and professional relations programs have concentrated in these areas: improvement of communication between physicians and their patients; development of a closer relationship between the OSMA and medical students; the commitment by OSMA to encourage the membership to take special consideration of the financial difficulties experienced by some patients due to the nation's economy; and sponsorship of public service activities. All programs were conducted in accordance with the general program approved by the House of Delegates in 1983.

Despite an OSMA staff vacancy during the last quarter of 1983, the council made significant progress in carrying out its programs.

Here are some of the council's accomplishments:

1. Improvement of Communication Between Patient and Physician: The council's Medical Up-

date series continues to provide a valuable service to patients by offering not only health-related information but also suggestions for cost effectiveness. Perhaps the most successfully received Medical Updates this year outline appropriate use of the emergency department.

In addition, the council prepared and distributed over 40,000 Patient Survey brochures. The surveys enabled physicians to analyze their methods of practice through the compliments and constructive criticism of their patients.

2. Consideration of a Patient's Financial Problems: The council acted quickly to support the OSMA resolution encouraging physicians to consider the financial needs of patients during these difficult economic times. A special edition of the *OSMA News*, sent to the entire membership, included an explanation of the resolution, a sample letter for physicians to send to their patients, and the experience of other state associations in dealing with this problem.

In addition, over 10,000 Medical Updates explaining the importance of continuing medical treatment and the willingness of physicians to accommodate a patient's financial situation were distributed.

3. Relations Between OSMA and Medical Students: The council is very pleased to report the growth of the OSMA student program. Fifty-eight medical students are now members of the OSMA. Indeed, these students will seek official designation as the OSMA Medical Student Section during the annual meeting.

Student enthusiasm for the OSMA is such that they now have assumed most logistical and organizational responsibilities for the popular "roundtable" discussion series and annual recruitment picnics in both Oklahoma City and Tulsa.

The council strongly feels this investment in medical students will produce significant dividends for our organization.

4. Public Service Activities: "None for the Road," an anti-drunk driving film produced by the Oklahoma Highway Patrol and cosponsored by the OSMA has been completed and is in distribution to television stations, civic groups, and schools.

The association also served as cosponsor for the annual Easter Party organized by Oklahoma Prevention of Child Abuse.

The council will continue to support such appropriate public service projects.

Objectives:

The Council on Professional and Public Relations has formulated a set of objectives designed to accomplish the goals stated earlier in this report. To achieve these objectives, the council requests that the activities listed in the recommendations section of the report be approved. A description of these objectives and recommended activities follows.

1. Objective: Communicate to the public the benefits of developing healthy living habits and making informed decisions about medical care. The council recommends that this type of information

be conveyed publicly by OSMA through radio public service announcements (PSAs) and the Medical Update brochure series.

The council also recommends the production of a new series of television public service announcements. However, in this time of cost consciousness, the council stipulates that production costs for such a project not exceed \$5,000.

2. Objective: Establish an OSMA Speakers Bureau. The council recommends the creation of an OSMA Speakers Bureau whose function would be to bring the message of organized medicine to interested medical, civic, church, and school groups.

The Bureau's goals are: (1) to clearly demonstrate the physician's involvement with the total community; (2) to educate these groups to the complexity of the medical/economic issues facing our country; and (3) to emphasize the necessity for a partnership between the medical community and the public in finding solutions to these problems.

The council feels the expertise of our retired members should be utilized in the formation of the Bureau.

The council also recommends the OSMA investigate the cost of producing a slide presentation which explains organized medicine's role in striving to maintain the high quality of medical care in this era of diminishing economic resources.

With cost containment in mind, the council recommends a budget limit of \$2,500 for the proposed slide presentation.

3. Objective: Continue OSMA Medical Student Programs. The council recommends continued support of the roundtable discussions and recruiting picnics in both Oklahoma City and Tulsa that have proven to be a successful introduction of medical students to the OSMA.

The council also wishes to formally acknowledge the untiring work of Wilson D. Steen, PhD, University of Oklahoma Department of Family Practice, in establishing the OSMA student programs.

4. Objective: Continue to enhance the association's image and contribute to the public's well-being through sponsorship of community service projects. The council recommends that OSMA continue its financial support of community service projects, such as the Oklahoma Prevention of Child Abuse annual Easter Party and summer swim party. OSMA receives favorable publicity through its sponsorship while providing a worthwhile service to those who benefit from the projects. The council recommends that OSMA select a maximum of four community service projects for 1983-84.

5. Objective: Continue to provide OSMA members with up-to-date information on scientific, legal, and professional developments affecting the practice of medicine. The council recommends that OSMA continue to publish the *OSMA Journal* and the *OSMA News* on a regular basis in order to keep members fully informed about key issues related to health care and the practice of medicine.

Recommendations:

Specific recommendations of the Council on Professional and Public Relations for the 1984-85 year,

along with budgetary requirements, are as follows:

A. Produce Medical Update brochures	\$ 3,000.00
B. Distribute radio public service announcements	500.00
C. Conduct student and resident communication programs	4,000.00
D. Sponsor community service projects	1,000.00
E. Publish <i>OSMA News</i>	6,500.00
F. Educational activities and professional dues	2,500.00
G. Produce television public service announcements	5,000.00
H. Produce OSMA slide presentation	2,500.00
	<u>\$25,000.00</u>

I. The contingency fund established by the association several years ago and later earmarked for a campaign against passage of national health insurance totals about \$35,000. It is being held in an interest-bearing account. The council recommends that the fund continue to be held in the account.

Respectfully submitted,
M. Joe Crosthwait, MD, Chairman
Howard A. Bennett, MD
Burdge Green, MD
Edward Jenkins, MD
Mary Anne McCaffree, MD
G. Craig Pitts, MD
Lanny Trotter, MD
Hal Vorse, MD
Robert J. Weedn, MD
Kenneth W. Whittington, MD
Greg Holt, MSII
M. Michael Sulzyski, Staff

**Report of the
COUNCIL ON PUBLIC AND MENTAL HEALTH**

Reference Committee II

Subject: Annual Report
Presented by: George W. Prothro, MD,
Chairman
Referred to: Reference Committee II

Introduction:

It is the goal of the Council on Public and Mental Health to provide the citizens of this state as well as OSMA members with timely information regarding the medical aspects of public and mental health and to conduct and oversee needed programs in these areas:

Review of Activities:

The activities of the Council on Public and Mental

Health for the 1983-84 year were largely determined by the report of the council which was approved by the House of Delegates in May of 1983, and by the committees which operate under the council's guidance. The following is an update on the approved program for the Council on Public and Mental Health and the committees which operate with the council's direction.

A. Health Education — Despite budgetary cut-backs due to the economic problem of the State of Oklahoma, the Oklahoma Health Education Advisory Council remains a functioning entity. Several health education projects supported by the OSMA have been postponed or reduced due to financial constraints. However, the Oklahoma Health Education Advisory Council continued to publish a quarterly newsletter in order to keep the coalition intact. The OSMA Council on Public and Mental Health continues its support of the projects and newsletter of the Oklahoma Health Education Advisory Council.

B. Maternal Mortality Committee — ~~This committee is established by an Oklahoma Statute and operates independently of our council and the association.~~ The annual report is attached for your information.

C. Perinatal Task Force — The OSMA has provided support for the Perinatal Task Force since its inception. The importance of the Perinatal Task Force, however, requires a specific placement within the OSMA council structure. It is recommended that the support of the Perinatal Task Force become an official function for the Council on Public and Mental Health with a member of the Perinatal Task Force making timely reports to the council.

A summary of the Perinatal Task Force's study, "Caring for Pregnant Women in Oklahoma: A State Plan" is attached to this report. ~~It is recommended that the OSMA officially endorse the plan and work to support legislation which would mandate payment for the emergency transportation of high-risk newborns (SB 425) and allow the establishment of Regional Perinatal Advisory Committees (SB 1822).~~ The task force deserves special commendation for its efforts in developing a comprehensive plan for perinatal care.

It is recommended that the Oklahoma State Medical Association support Governor George Nigh's plan to create by executive proclamation an advisory committee on perinatal care in Oklahoma and that the advisory committee work with the State Department of Health, the OSMA and the private sector in developing a financing and implementation plan for perinatal care in the state.

D. Work-Related Illness/Injury — The council will continue to seek clarification from the National Institute for Occupational Safety and Health regarding their classification of cardiovascular diseases, lung cancers, and psychological disorders among the ten leading work-related diseases.

E. Vietnam Veterans — The council recognizes the unique problems experienced by many due to their service in Vietnam. The council encourages the OSMA to express their concern for these Vietnam veterans through support of the resolution attached to this report.

Public Health/Millage Amendment — The coun-

Proceedings *(continued)*

cil recognizes that federal and state funding reductions have seriously affected public health programs in our communities. The council encourages the active support of the OSMA as indicated in the attached resolution for a state constitutional amendment, scheduled for vote in August, that would allow individual counties the option to increase from 2½ to 5 the millage necessary to fund public health programs.

Recommendations:

1. Support the work of the Oklahoma Health Education Advisory Council.
2. Support and follow the two resolutions introduced by this council.
3. Continue the activities of this council as outlined by this report.
4. Approve the requested fiscal note for this council.

Budget Requests:

Council and Committee Expenses	\$1,000.00
Maternal Mortality Committee	250.00
Other Council Programs and Internal Educational Programs	<u>1,000.00</u>
TOTAL	<u>\$2,250.00</u>

Respectfully submitted,
George W. Prothro, MD, Chairman
Frank L. Adelman, MD
R. Leroy Carpenter, MD
Edgar M. Cleaver, MD
Gordon H. Deckert, MD
Sara R. DePersio, MD
Hayden H. Donahue, MD
John W. Drake, MD
Jodie L. Edge, MD
George B. Gathers, Jr., MD
Mark R. Johnson, MD
Joan K. Leavitt, MD
Bertha M. Levy, MD
Mary Anne McCaffree, MD
Edward K. Norfleet, MD
W. R. Reid, MD
John E. Ward, MD
Randall Webb, MSII
M. Michael Sulzyski, Staff

Caring for Pregnant Women and Their Children in Oklahoma: A State Plan

The Problem

Oklahoma has the highest percentage of women receiving little or no prenatal care of any state on record. Sixty-three hundred (6,300) pregnant women receive inadequate prenatal care in Oklahoma each year. The correlation between inadequate prenatal care and bad pregnancy outcome is well documented. Fetal deaths, deaths of new-

born infants, severe life-long handicaps, tremendous personal distress to families, and a heavy financial burden to our state are some of the consequences of insufficient perinatal* care.

In March of 1983, a group of health care providers, state health officials, legislators, and other interested citizens formed the State Task Force on Perinatal Care to improve access to perinatal care. The Task Force concluded that *if no changes are made*, each year —

- Oklahoma will spend \$116,500,000 for the consequences of poor pregnancy outcome
- 4,200 infants will be born prematurely
- 1,200 infants will die before birth or during the first year of their life
- 180 will have severe long-term handicaps
- 450 will be born with birth defects or genetic problems.

The Potential for Change

Because many of these problems are preventable, the Task Force has proposed a comprehensive plan to reduce the risk of perinatal death and disability. The direct costs of this plan are offset by reductions in the direct costs of caring for disabled individuals. More importantly, the program will save lives and improve the future for thousands of Oklahomans.

The State of Oklahoma can save nearly \$20 million each year in state funded services, payments, and programs:

- \$722,237 yearly state savings for rehospitalization of infants during their first year of life
- \$5,372,745 yearly state savings in special education for children with handicaps
- \$8,637,508 yearly state savings for handicapped education in state schools
- \$5,192,260 yearly state savings in public assistance to disabled and blind rehabilitation program
- additional savings in state, federal and community expenses such as programs at Oklahoma's Health, Human Services and Mental Health Departments, portions of AFDC payments, etc.
- implementation of this plan costs less than \$5,000,000 — a net savings of 15.2 M tax dollars yearly.

What These Changes Could Mean For Our Children and Families

A commitment to establish a comprehensive perinatal care program in our state will make it possible to:

- improve pregnancy outcome by preventing death and disability in Oklahoma's children
- improve access to sophisticated maternal and child health care
- improve the chances for healthy survival of many premature and low birthweight babies
- significantly reduce the number of long-term handicaps among our children
- reduce the costs incurred by families to care for seriously ill infants and children.

What This State Perinatal Plan Would Do

This plan proposes a series of well-coordinated components to achieve the best care possible for pregnant women and their infants in Oklahoma. It would:

- Establish six state perinatal planning and education regions
- Develop inexpensive prenatal outpatient clinics in underserved areas
- Upgrade inpatient care facilities and equipment to care for at-risk mothers
- Organize perinatal education for health care workers
- Improve infant emergency transportation to care facilities
- Save costs by transporting recovering infant back to home community for future care
- Establish a uniform system to screen for high-risk mothers

*The perinatal period includes pregnancy and the first month of life.

- Follow-up on high risk infant
- Educate the women of Oklahoma about the necessity for and availability of prenatal care
- Developing a pregnancy support program for at-risk mothers
- Initiate and combine state, federal, and private funding of pregnancy care to ensure services are available to all women.

The Report of the Maternal Mortality Committee of the Council on Public and Mental Health

The Maternal Mortality Committee reviewed seven cases. One case was from 1970 and two cases each year from 1980, 1982, and 1983. Five of the women were white, one black and one American Indian. The ages ranged from a low of 14 to a high of 43, with a mean age of 23 years. Four of the deaths were direct obstetric deaths, two deaths were indirect, and one was a nonobstetric death. Of the seven deaths, two were determined not to have preventable factors. Of the five deaths with preventable factors, two were due to religious convictions. The causes of death were: toxemia, congestive heart failure, anesthesia complication, hemorrhage, sepsis, drug overdose, and a pulmonary embolus. Five of the deaths had an autopsy performed. The perinatal outcome of the cases resulted in two live births, two fetal deaths, one early fetal death, and two cases of postpartum death where the perinatal outcome was not stated.

For many years, maternal mortality was a major concern of pregnancy. Changes in the provision of care to women during pregnancy and delivery, and investigation into the causes of maternal deaths have led to reductions in maternal mortality. The maternal mortality rate in Oklahoma for 1950 was 95.1 deaths per 100,000 live births; for the period 1975-1979 the rate was 16.76 deaths per 100,000 live births. This represents a decrease of 82.38 percent. Although this decline in Oklahoma's maternal mortality represents great improvement, the Oklahoma rate of 16.76/100,000 for 1975-1979 is nearly two times the US rate of 9.6/100,000 for 1978. The need for continued improvement is clear.

A study of maternal mortality in Oklahoma by cause and decade (Table 1) showed that from 1950-1979 the leading cause of death was obstetric hemorrhage, followed by toxemia. When maternal mortality in Oklahoma was analyzed for the time period 1975-1979 (Table 2), obstetric hemorrhage as the leading cause of death had been replaced by toxemia, followed by sepsis, ectopic pregnancy, and then obstetric hemorrhage. These changes in the leading cause of death are consistent with data published for the US from 1978 (Table 2).

Of the 38 maternal deaths that occurred in Oklahoma from 1975-1979, 57.89% were white, 36.84% were black, and 5.26% were Indian. In comparison, the percent distribution of live births for the same time period attributes 81.65% of the births to whites, and 9.96% and 8.39% to blacks and Indians, respectively. Thus black maternal mortality constitutes a disproportionate number of maternal deaths. Direct obstetric causes accounted for 89.47% of the deaths, the remaining 10.53% were from indirect causes. Preventable factors were present in 63.16% of the deaths, 23.68% were perceived as not having preventable factors, and the factors of preventability were undetermined in 13.16% of the cases. Married women accounted for 76.32% of the deaths and single women for the remaining 23.68%. Autopsies were performed in 57.89% of the cases, were not performed in 34.21% of the cases, and autopsy status was unknown for 7.89% of the cases.

The Maternal Mortality Committee currently has 10 cases scheduled for review later this year.

Respectfully submitted,
Sara Reed DePersio, MD

Chair

Schales Atkinson, MD
Frank Barnett, MD
Kathleen Carlson, MD
Warren Crosby, MD
Elaine Davis, MD
Robert W. Dean, MD
Robert E. Dillman, MD
Guy W. Fuller, MD
William P. Gideon, MD
Manuel Hensley, MD
Robert R. Hillis, MD
Richard T. Jennings, MD
Gordon K. Jimerson, MD
Gary LaBarre, MD
John B. Nettles, MD
Clarence P. Taylor, MD
Adolph N. Vammen, MD

Table 1

Maternal Deaths by Cause and Decade
Oklahoma, 1950-1979
(Percent Distribution)

Causes	All Races			
	Decade			
	Total 1950- 1979	1950- 1959	1960- 1969	1970 1979
Obstetric				
Hemorrhage	24.4	27.2	22.1	18.5
Toxemia	17.1	20.5	12.8	12.6
Abortion	8.7	8.7	9.3	7.8
Puerperal				
Infection	7.2	3.5	9.9	15.5
Ectopic Pregnancy	7.0	6.2	5.8	11.7
Amniotic Fluid				
Embolism	4.3	1.7	8.7	5.8
Pulmonary				
Embolism	4.3	4.2	5.8	1.9
Anesthetic				
Complication	5.2	4.8	6.4	4.9
Cardiovascular				
Disorder	7.0	8.7	5.2	3.9
Others	14.8	14.5	14.0	17.4
Total	100.0	100.0	100.0	100.0
(Number of Deaths)	(632)	(357)	(172)	(103)

Table 2

Maternal Deaths by Cause
Oklahoma 1975-1979 Average, United States 1978
(Percent Distribution)

Causes	Oklahoma	United States
Toxemia	20.78	19.31
Sepsis	18.42	19.00
Ectopic Pregnancy	15.79	11.53
Obstetrical Hemorrhage	7.89	11.21
Amniotic Fluid Embolism	7.89	
Anesthetic Complication	5.26	
Pulmonary Embolism	2.63	
Abortion	2.63	4.98
Other	15.79	33.33
Total	100.00	100.00
(Number of Deaths)	(38)	(321)

Report of the
COUNCIL ON MEDICAL EDUCATION

Reference Committee II

Subject: Annual Report
Presented by: William R. Smith, MD, Chairman
Referred to: Reference Committee II

Introduction:

The council shall study and make recommendations related to all matters of maintaining or improving the level of competency of physicians in Oklahoma, including but not limited to, maintaining liaison with the medical education colleges in Oklahoma, to conducting continuing medical education courses for association members, and to the accrediting of medical education programs in Oklahoma. It will also monitor continuing medical education standards as they may be required by association policy.

A. Continuing Medical Education Survey and Accreditation Program — An important activity of the council is the survey and accreditation program. The council continues its activities of surveying and certifying for accreditation the continuing medical education programs of Oklahoma hospitals and independent organizations which meet the requirements. The OSMA has the sole responsibility, an extension of the national accrediting group, the Accreditation Council on Continuing Medical Education, of approving state CME programs.

This year Oklahoma, because of the accreditation of Duncan Regional Hospital, has the greatest number of accredited hospitals since the program began in 1977. At the present time, the following institutions are fully accredited to produce their own Category I Continuing Medical Education:

Baptist Medical Center, Oklahoma City
Hillcrest Medical Center, Tulsa
Mercy Health Center, Oklahoma City
Presbyterian Hospital, Oklahoma City
St Anthony Hospital, Oklahoma City
St Francis Hospital, Tulsa
St John Medical Center, Tulsa

Hillcrest and St Anthony have both recently been resurveyed and if approved, they will be the first two hospitals to have their accreditation extended for the third time. There are two new organizations, neither of which are hospital-based, which are in the process of making application for a survey.

It is true that attendance has decreased at individual CME offerings across the state, but it is still encouraging that these programs are continuing to be useful on a voluntary basis.

B. Physician Manpower Study — Last year this council had a special report on the creation and activities of the Health Manpower Surveillance Committee. The committee completed its task and a recommendation was made that the Oklahoma Regents

for Higher Education be asked to do an official study.

OSMA officials met with Dr Joe Leone, Chancellor of the State Regents for Higher Education, and were informed that he is progressing with the study and should be in contact with the medical association soon in order to identify representatives to serve on such a study group.

C. Medical School Liaison — We have been very encouraged throughout the past year with the response from the medical schools and the communications that have been developed. Charles McCall, MD, dean of the College of Medicine at the University of Oklahoma Medical School, and Edward Tomsovic, MD, dean of the University of Oklahoma Medical School, Tulsa Branch, have been very faithful in their attendance at council meetings and have worked very hard in encouraging the medical students to become involved in organized medicine. Dr McCall has made some changes in the office of continuing medical education and this should make for excellent communication between the practicing physician and the CME office at OU.

There had been a communication gap between the council and the dean of the Oral Roberts Medical School, but recently we were given the name of the new dean and assured he would be available to attend our meetings.

Recommendations:

1. The OSMA continue its support and open communications with the Oklahoma medical schools.
2. The OSMA support the efforts of the State Regents for Higher Education and their study of health manpower in Oklahoma.
3. The OSMA continue to actively survey and resurvey institutions and organizations for continuing medical education accreditation.
4. The council continue to send representation to local, state, and national educational meetings when appropriate.

Budget Requests:

Accreditation program	\$ 500.00
Education opportunities	1,500.00
TOTAL	\$2,000.00

Respectfully submitted,
William R. Smith, MD, Chairman
John R. Alexander, MD
Irwin H. Brown, MD
David B. Hinshaw, MD
Thomas S. Llewellyn III, MD
Thomas N. Lynn, Jr., MD
Charles B. McCall, MD
Harris J. Moreland, MD
Edward J. Tomsovic, MD
Lee Pedersen, MSII

**Report of the
JOURNAL OF THE
OKLAHOMA STATE MEDICAL ASSOCIATION**

Reference Committee II

Subject: Annual Report
Presented by: Mark R. Johnson, MD, Editor
Referred to: Reference Committee II

The JOURNAL of the Oklahoma State Medical Association has maintained its position as one of the nation's finest medical publications by providing its readers with timely, significant scientific articles and book reviews as well as current news information concerning the medical profession in both our state and nation. The JOURNAL remains a very popular and important benefit of membership in the association.

The style, content, and graphics of the JOURNAL were evaluated during the past year by publications professionals with the American Society of Association Executives. The evaluation compared the JOURNAL favorably with other medical publications and noted the potential for the JOURNAL to be a forerunner in the field of medical journals by augmenting the quiet, sophisticated look of the JOURNAL with more lively, dynamic graphics.

Subtle, technical changes in type, headlines, and the structure of individual sections of the JOURNAL will continue in the effort to make the JOURNAL even more readable. An effort will be made to use excess white space at the conclusion of articles for anecdotes or information from the history of Oklahoma medicine.

The series "Leaders in Medicine" will continue to be a feature in selected issues. The articles will focus on Oklahoma physicians who have made significant contributions to medicine in the state and, in the opinion of the Editorial Board, deserve to be recognized for their accomplishments.

The Editorial Board has selected winners of the \$500.00 Charlotte S. Leebron Memorial Trust Award given annually to the authors of the year's best scientific paper published in the JOURNAL.

The award will be shared by Charles G. Helmick III, MD; Andrew A. Vernon, MD; Stanley S. Schwartz, MD; Michael Ward, MD; and Mark Roberts, PhD. They coauthored the article "Rabies in Oklahoma: Report of a Human Case," which appeared in the August 1983 issue of the JOURNAL. The award will be presented at the OSMA Annual Meeting.

Advertising rates for the JOURNAL will be raised five percent across the board if printing costs do not rise. The increase will become effective in January 1985. If printing costs do rise, advertising rates will be adjusted accordingly.

Respectfully submitted,

Mark R. Johnson, MD
Editor-in-Chief

Harris D. Riley, Jr., MD
Editor

Robert G. Tompkins, MD
Editor

**Oklahoma
State Medical Association
House of Delegates**

Resolution: 1
(Adopted)

Introduced by: Council on Public and
Mental Health

Subject: Viet Nam Veterans
Referred to: Reference Committee II

WHEREAS, Over 2.5 million (of the best) of our American citizens served their country in the Viet Nam conflict; and

WHEREAS, Over 55,000 Oklahomans heeded their nation's call to battle and bravely served on that foreign soil, risking their lives, regardless of the geopolitical uncertainties and unpopularity of the war in which they were engaged; and

WHEREAS, The physical health and mental well-being of these veterans were subjected to a whole spectrum of potentially unhealthy and life-threatening conditions even beyond battlefield peril, including exposure to chemicals and dioxin-contaminated herbicides used during that conflict; and

WHEREAS, Upon returning to this country, the plight of these veterans was complicated by many diverse political and sociological pressures which constituted an attack on their honor, personal integrity, and self-esteem; and

WHEREAS, These veterans were often criticized and had the vast burden of their problems and complaints ignored by a significant portion of the populace in whose name they had been risking their very lives; now therefore be it

Resolved, That the House of Delegates of the Oklahoma State Medical Association strongly urge their physician colleagues irrespective of their feelings about the Viet Nam War politically or morally, or regardless of the present lack of definite information concerning the health hazards to which many of these veterans were subjected, to publicly recognize the problems that many of these veterans continue to face and take every opportunity to assist them with our experience, respect, compassion, and medical abilities.

**Oklahoma
State Medical Association
House of Delegates**

Resolution: 6
(Adopted)

Introduced by: Payne-Pawnee County
Medical Society

Subject: Cognitive Services Reimbursement
Referred to: Reference Committee II

WHEREAS, All physicians provide a mix of both diagnostic evaluation and procedural services; and

WHEREAS, Diagnostic evaluation can be defined as those services that directly employ the physicians'

perception, judgment, and knowledge to find out what is wrong with the patient and to decide the best course of treatment; and

WHEREAS, Technological procedures involve the use of technology and/or manual skills to obtain clinical data or to treat disease; and

WHEREAS, Most existing reimbursement systems provide disproportionately low allowances for such diagnostic services as complete histories and physical examination, office, nursing home and hospital visits, and medical and surgical consultations in comparison to procedural services; and

WHEREAS, Many technological procedures also require considerable diagnostic skill and judgment on the part of the physician providing the procedure; and

WHEREAS, The diagnostic skills required to provide those procedures are also reimbursed at a disproportionately low level compared to the actual performance of the procedure; and

WHEREAS, This reimbursement discrepancy may contribute to high medical care costs by rewarding physicians for ordering tests and procedures, and by penalizing them for spending time with patients and deciding not to order costly procedural services; and

WHEREAS, There is a growing body of opinion and research to support the concept that a reimbursement system that better rewards diagnostic services might help moderate medical care expenditures and promote the kind of caring, personalized approach to health desired by most patients and physicians alike; now therefore be it

Resolved, That the Oklahoma State Medical Association support the concept of more equitable reimbursement for physicians when they engage in diagnostic evaluation and therapeutic management; and be it further

Resolved, That the Oklahoma State Medical Association take appropriate action to promote this concept with third-party payors, business groups, and other professional associations.

Oklahoma State Medical Association House of Delegates

Resolution: 8
(Adopted as amended)

Introduced by: William O. Coleman, MD
Subject: Excess Supply of Physicians
Referred to: Reference Committee II

WHEREAS, The number of physicians in the US is increasing at an alarming rate — from a ratio of 140 per 100,000 population in 1950 to over 200 per 100,000 population in 1980, with a projected 240 per 100,000 by 1990 and 280 per 100,000 by the year 2000; and

WHEREAS, The Graduate Medical Education National Advisory Committee (GMENAC) projects a surplus of 62,760 (13.3%) physicians in 1990 with a

surplus of 137,000 (27.1%) for the year 2000; and

WHEREAS, Recent experience shows that an excess of physicians produced higher, not lower, costs and further produces unnecessary medical services which in turn represents unnecessary risks for the patient. A surplus of 10,000 physicians in California (as of December 1980) generated an estimated cost to the California health care system of approximately three billion dollars annually; and

WHEREAS, Applicants to the National Resident Matching programs increased from 19,155 in 1981 to 28,384 in 1984 (with only 20,000 first-year positions available), US graduate applications only increased from 15,496 to 15,987 (3%). However, the US graduate applicants of foreign medical schools increased from 785 in 1981 to 2,931 (273%) in 1984 and the alien graduate applicants of foreign medical schools increased from 1,731 to 7,124 (312%); and

WHEREAS, Unless the AMA leadership, preferably together with allies, moves quickly to reassess its policy toward reduction in medical school admissions (allopathic and osteopathic), state and county societies will act on their own (by encouraging legislatures to stop spending tax dollars to increase the number of potential competitors in the face of an actual decline in the demand for physician services); and

WHEREAS, The equally important issues of both the foreign medical school graduate (US citizen and noncitizen) and minority enrollment in US schools need to be addressed; now therefore be it

Resolved, That the OSMA House of Delegates request the AMA House of Delegates to urge its leadership, through appropriate council or its Board of Trustees, to form an alliance or coalition, together with the leaders in industry, medical education, and specialty boards, major insurance, third-party payors, and government, to accomplish the following goals:

- 1) New entrants to US allopathic and osteopathic schools should be reduced from the present level of about 18,200 to approximately 16,000.
- 2) Minority enrollment in US medical schools should be increased in proportion to the expected future representation of each ethnic minority group in the general population regardless of gender. This will require a broad social consensus development with a national colloquium of leaders in education, business, religion, and government — with government financing.
- 3) US citizens should be discouraged in the future from entering foreign medical schools by requiring that medical licensure be granted only to graduates of accredited US and Canadian medical schools. Americans currently in foreign schools should be allowed to complete their studies and gain licensure to practice after successful completion of examination. The Federation of State Licensing Boards should assume leadership in this effort.
- 4) A select number of alien graduates of foreign medical schools should be welcomed for training but denied licensure for permanent practice unless they are granted US citizenship under a family-preference clause.

Oklahoma
State Medical Association
House of Delegates

Resolution: 15
(Adopted as amended)

Introduced by: Council on Medical Services
Subject: Support for Prudent Negotiations of
Practice Contracts
Referred to: Reference Committee II

WHEREAS, Costs of medical care in the United States continue to escalate at a pace consistent with other segments of the economy in the United States, and there is a growing focus of attention on the cost of health care; and

WHEREAS, When society becomes concerned about increasing costs, the media and Congress seem inclined to point the finger of blame at health care; and

WHEREAS, Economists have more or less artificially set a rate of 10% as being the maximum of the Gross National Product that should be expended for health care, and third-party insurance carriers, health care economists, Congress, and a widening body of concerned business leaders have come forth in the past few years with a variety of health care financing proposals to restrain further increases in costs of health care, and physicians find themselves assailed from all sides with a variety of new contract medicine options which ostensibly and theoretically will regulate further increases in the cost of health care, eg (1) Prudent Purchaser Options, (2) Preferred Provider Organizations, (3) Health Maintenance Organizations, and (4) Independent Practice Associations; and

WHEREAS, Physicians find themselves uncertain as to the most appropriate course to follow and the most ~~beneficial~~ appropriate type of contract to sign; and

WHEREAS, For a variety of reasons, including restrictions imposed by federal bureaucracies, state medical associations, and other organized medical societies are relatively powerless to provide aggressive leadership in counseling physicians and groups of physicians; and

WHEREAS, For a variety of reasons, including restrictions imposed by federal bureaucracies, organized medical societies such as state medical associations, and national medical organizations are relatively powerless to provide aggressive leadership needed to aid physicians in making decisions on these matters; now therefore be it

Resolved, That the Oklahoma State Medical Association encourages its membership to closely study and support private physician groups and similar organizations which can aid them in obtaining legal advice and developing prudent negotiations for the contracting procedure with third-party carriers and government agencies; and be it further

Resolved, That the Oklahoma State Medical Association urge its members, before they sign any contract with any health care agency, to avail themselves of the advice and opinions of their lawyer, and other competent advisors.

Late Resolution
Oklahoma
State Medical Association
House of Delegates

Resolution: 16
(Adopted as amended)

Introduced by: Ed L. Calhoun, MD
Subject: Hazards of Smoking
Referred to: Reference Committee II

WHEREAS, Cancer is the number two cause of death in the US; and

WHEREAS, 870,000 malignancies will be diagnosed this year; and

WHEREAS, 450,000 people will die from cancer in 1984; and

WHEREAS, ~~35-40%~~ 30-35% of all malignancies are likely the result of causative agents in cigarettes and are therefore preventable; now therefore be it

Resolved, That the Oklahoma State Medical Association House of Delegates hereby encourages all physicians to schedule extra time, ~~at least 60 seconds~~, to explain the extreme health hazards of smoking to their cigarette-smoking patients; and be it further

Resolved, That this resolution be forwarded for consideration by the AMA House of Delegates.

Late Resolution
Oklahoma
State Medical Association
House of Delegates

Resolution: 18
(Adopted as amended)

Introduced by: Pontotoc-Johnston-Murray
County Medical Society
Subject: Smokeless Tobacco (Snuff and
Chewing Tobacco)
Referred to: Reference Committee II

WHEREAS, An estimated 27,000 individuals in the United States are afflicted with oral cancer each year that causes approximately 9,200 deaths; and

WHEREAS, Smokeless tobacco contains high concentrations of carcinogens and is associated with an increased risk of oral cancer; and

WHEREAS, Smokeless tobacco contains nicotine which is a dependence-producing drug; and

WHEREAS, Smokeless tobacco contributes to dental problems such as receding gums, abrasion of teeth, discolored teeth, and possible dental decay since sugar may be added during the curing process; and

WHEREAS, The use of smokeless tobacco has become an increasing problem among school children as well as adults in Oklahoma; now therefore be it

Resolved, That the Oklahoma State Medical Association hereby declares that snuff dipping and tobacco chewing are hazardous to health, and are certainly not safe alternatives to smoking; and be it further

Proceedings *(continued)*

Resolved, That the OSMA request that the Surgeon General require a health hazard warning on smokeless tobacco similar to the warning currently on cigarettes; and be it further

Resolved, That Oklahoma physicians make every effort to discourage the use of smokeless tobacco; and be it further

Resolved, That this resolution be submitted to the House of Delegates of the American Medical Association.

Late Resolution Oklahoma State Medical Association House of Delegates

Resolution: 19
(Adopted as amended)

Introduced by: Tulsa County Medical Society
Subject: Commendation of Edward K. Norfleet, MD
Referred to: Reference Committee II

WHEREAS, Edward K. Norfleet, MD, has moved his practice from Tulsa to Vinita; and

WHEREAS, As a result of this change, Dr Norfleet has resigned as an OSMA Alternate Trustee and as a member of the House of Delegates; and

WHEREAS, Dr Norfleet has over a long period of years served OSMA in many official capacities, including vice-president, trustee, alternate trustee, delegate, and as a member of many councils and committees; ~~now therefore be it and~~

WHEREAS, Edward Norfleet has had an open and continuing love affair with medicine for over 32 years; and

WHEREAS, His heart and soul are always in tune with the needs and best interests of medicine; now therefore be it

Resolved, That the House of Delegates commend this respected physician and medical leader for his long years of service to Oklahoma State Medical Association, and express the gratitude of the medical profession of Oklahoma for his invaluable efforts; and be it further

Resolved, That Ed Norfleet be commended for his love, loyalty, devotion, and dedication to medicine and that he always be known as a friend to OSMA and medicine.

Report of REFERENCE COMMITTEE III

Presented by: William O. Coleman, MD, Chairman

Mr Speaker and Members of the House of Delegates:

Reference Committee III considered the agenda items which were referred to it and submits the following report:

(1) Report of the Council on Governmental Activities

Recommendation:

Mr Speaker, Reference Committee III heard a rather sobering and realistic report from Dr Perry Lambird, council chairman, concerning the status of federal legislation both present and future affecting the practice of medicine. Dr Lambird explained the temporary victory with mandatory assignment and commended Congressman James R. Jones for his overt help in defeating mandatory assignment. Dr Lambird was quick to point out that without the active involvement of the AMA, state and county societies, and practicing physicians, that mandatory assignment would not have been defeated this session. Dr Lambird also mentioned to the Reference Committee the likelihood that changes *will be made*

in the Medicare Physician Reimbursement Program after the 1984 elections and urged all physicians to become more politically active and able to respond to these changes. A report was given on the OSMA Medicare Demonstration Project and the work that has been done by Congressman Mickey Edwards in introducing this project into legislation during the 98th Congress. Though the status of this legislation has changed somewhat, this Reference Committee would like to commend Dr Lambird and the Council on Governmental Activities and Congressman Edwards for their diligent efforts. Special appreciation is expressed to Dr George Kamp for the many hours away from his practice dealing with Congress during this most trying year. Reference Committee III recommends that the report on the Council of Governmental Activities be adopted.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(2) Report of the Council on State Legislation

Recommendation:

Mr Speaker, Reference Committee III listened to an excellent presentation by Dr William Hughes,

council chairman, concerning the amount of legislation considered by this council. After considerable testimony it was apparent to the Reference Committee that the amount of legislation affecting medical practice will continue to increase and the OSMA should be diligent in its efforts to support an active and aggressive state legislative program. It was made evident to the Reference Committee that OMPAC membership is a key ingredient to our effectiveness at the State Capitol. Reference Committee III gives strong commendation to Dr William Hughes and the Council on State Legislation for all of their efforts in carrying out the association's legislative activities. Reference Committee III recommends adoption of this report.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(3) Council on State Legislation Report A

Recommendation:

Mr Speaker, your Reference Committee listened to discussion of the need for OSMA to have a lay council comprised of community leaders from around the state to become informed on the issues affecting medical care in Oklahoma. The Reference Committee commends the Council on State Legislation on their foresight and recommends that Report A be adopted.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(4) Report of the Council on Medical Services

Recommendation:

Mr Speaker, your Reference Committee III heard from Dr John Blaschke concerning the many areas of responsibility for the Council on Medical Services. The Reference Committee was informed as to the status of the Appropriateness Review Committee and the continued efforts of HCFA changing Oklahoma to a single statewide Medicare reimbursement. Your Reference Committee commends Dr Blaschke for his excellent chairmanship and recommends adoption of this report.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(5) Report of the Council on Member Services

Recommendation:

The council members and OSMA staff have done an excellent job in carrying out many assignments relating to new employee seminars, contacting the membership on DRGs, contract medical care, OSMA insurance programs, and the like. This council spends a lot of time with matters affecting PLICO professional liability and the Hosue of Delegates should commend the council and staff for all of their work. Mr Speaker, Reference Committee III recommends adoption of this report.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(6) Report of the Oklahoma Medical Political Action Committee

Recommendation:

Mr Speaker, your Reference Committee III heard from Dr William Leebron, OMPAC chairman, and again was reminded of the need for Oklahoma physicians to join OMPAC to make our legislative efforts more effective. Reference Committee III recommends adoption of the OMPAC report.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(7) Report of the Physicians Committee

Recommendation:

Mr Speaker, your Reference Committee III is impressed with the new guidelines for this committee which has been renamed Physician Recovery Committee. The Reference Committee recognizes the drastic impact of alcohol and drug dependence on members of the medical profession and lauds the efforts of this committee and the OSMA to actively deal with this problem. The report calls for structural changes in the committee and the authorization for expenditures to support an aggressive intervention program. The Reference Committee III recommends adoption of this report.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(8) Resolution 3 — Voluntary Fee Freeze

Recommendation:

Your Reference Committee III recommends that Resolution 3 be adopted.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(9) Resolutions 4 and 7 — Federally Financed Health Care Programs and Hospital Fee Freeze

Recommendation:

Mr Speaker, your Reference Committee heard testimony on Resolutions 4 and 7 and decided to combine these two resolutions and recommends adoption of the following substitute resolution:

Resolved, That all entities involved in the delivery of health care display the same sensitivity to economic factors facing patients and respond by stabilizing their charges for one year as initiated by Oklahoma physicians.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(10) Resolution 9 — County Health Department Millage

Recommendation:

Reference Committee III recommends adoption of this resolution.

Mr Speaker, your Reference Committee recommends

adoption of this portion of the report.

(11) Resolution 12 — Prospective Payment System

Recommendation:

Mr Speaker, your Reference Committee discussed Resolution 12. While the Reference Committee is in agreement and sympathetic to the thrust of this resolution, it was felt that the negative impact would outweigh the benefit. The Reference Committee recommends that Resolution 12 not be adopted.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

(12) Resolution 17 — Medicare Attestation

Recommendation:

Mr Speaker, your Reference Committee discussed Resolution 17 at some length and is in agreement with the concept of this resolution, and urges the AMA to continue its efforts, and also encourages the OSMA through its Council on Governmental Activities to discuss this issue with our congressional delegation. However, since the AMA has already initiated an aggressive campaign to modify, amend, or rescind the Medicare Attestation, it is recommended that the resolution not be forwarded to the AMA. Therefore, your Reference Committee recommends that the final resolve of Resolution 17 be deleted. Mr Speaker, I move that Resolution 17 be adopted as amended.

Mr Speaker, your Reference Committee recommends adoption of this portion of the report.

Respectfully submitted,
William O. Coleman, MD, Chairman
Stephen E. Trotter, MD
Rollie E. Rhodes, Jr., MD
Richard H. Bottomley, MD
John W. Drake, MD
Boyd O. Whitlock, MD
Lyle Kelsey, Staff
Ann McWatters, Staff

Report of the COUNCIL ON GOVERNMENTAL ACTIVITIES

Reference Committee III

Subject: Annual Report

Presented by: Perry A. Lambird, MD, Chairman

Referred to: Reference Committee III

Introduction:

Rising federal deficits and an unprecedented escalation in health care costs over the past few years have caused an intense scrutiny of America's health care delivery system. The initiation of government-sponsored competitive health care delivery models and the influx of massive amounts of risk capital, as

well as the continued enrollment and graduation of new doctors from medical schools, have created a new practice environment for physicians. Major philosophical and financial changes implemented by government and commercial insurers have added to the general concern and confusion. New laws and contracts requiring stringent review of medical services delivered to patients is a bothersome but forced reality.

The council has attempted to deal with and influence these changes throughout the year. With the help of John Montgomery, our Washington representatives, the AMA Washington office and our council and OSMA officer efforts, we have been successful. This report will discuss the highlights of our federal legislative activities.

The Oklahoma congressional delegation has been exceptionally receptive to the association's visits to Washington, and the association has, in turn, been responsive to congressional requests for advice and assistance. Senator David Boren and Congressman Jim Jones, because of their positions on the Senate Finance Committee and the Budget and Ways and Means Committee (respectively), have been especially helpful. Representative Mickey Edwards has agreed to sponsor legislation authorizing the Oklahoma Medicare Demonstration Project, which is in draft form at this time.

OSMA's federal government relations program is unique within the federation and has proven to be an effective and cost efficient strategy for influencing health policy in Washington.

Activities:

Medicare Demonstration Project — OSMA's alternative to the Medicare program is in legislative form. The council met recently and with minor modification approved introduction of the proposal. Representative Mickey Edwards has agreed to present the bill in the House of Representatives. The House of Delegates approved the conceptual draft of the plan at the last annual meeting and authorized expenses to develop the actuarial data to support this new initiative. Other Oklahoma congressmen have indicated a strong interest in the plan, and the council anticipates introduction no later than the next session of Congress. Dr Kamp has appointed an ad hoc committee to work with senior citizens to explain and garner support for the plan. (The proposed legislation is attached as Appendix A of this report.)

Mandatory Medicare Assignment — The most controversial issue to come before the Congress this year would have required that all physicians with hospital staff privileges agree by contract to accept assignment on all Medicare patients. The assignment issue had strong support from the Democratic leadership in the House of Representatives and from senior citizens' groups nationwide. OSMA and AMA officials lobbied extremely hard against this proposal. There were a number of trips to Washington, a special appeal to the membership, and extraordinary efforts by many association members. The amendment was finally defeated by voice vote in the

House and should be dead for this session of Congress. Physicians who responded to the association's appeal deserve extra accolades for this successful effort.

Professional Review Organizations — In a special called meeting of the House of Delegates, the Oklahoma Foundation for Peer Review was authorized to submit an application to the Health Care Financing Administration to become the PRO for Oklahoma. The application was submitted on April 27, and the foundation should know in the next six weeks if they will receive the two-year contract. The level of review under the PRO is considerably more intense than under PSRO, and regulations mandate that the review be conducted by OFPR personnel rather than delegated to hospital employees, as was the case under the PSRO. The PRO's primary function will be to verify the necessity for admission and to validate the DRG coding. Foundation employees have been conducting briefings with physicians and hospital personnel around the state explaining the new PRO program. Physicians who wish to schedule such a meeting may call the foundation at (405) 840-2891.

When the Congress approved the Prospective Pricing System (of which DRG is a part), they instructed the Department of Health and Human Services to conduct a study to determine if a similar payment system should be instituted for physicians. The study has not been completed, but recently introduced legislation, the Kennedy-Gephardt bill, would require the implementation of such a plan. Your council will follow closely the progress of these activities.

Grace Commission Report — President Reagan's government cost cutting commission appointed a task force to study the Medicare program. The task force report is still being studied, but some of the recommendations surfaced in legislation being considered by the Senate Finance Committee. Incentives encouraging physicians to take Medicare assignment were included in the bill, as well as a provision permitting doctors to make a decision each year on whether or not to participate in the Medicare assignment program. These bills have not passed, but it is obvious that many changes in the Medicare program will be recommended next year.

Regulatory Issues — PRO is a good example of reasonably good legislation resulting in very bad regulation. Senator Durenburger's legislation that created PROs was an effort to streamline and standardize the PSRO program. HCFA is using the legislation to implement another congressional act — the Prospective Pricing System. The regulations which were strongly protested by AMA and OSMA require much more detailed review and will require almost twice the personnel and funding. The new program almost completely ignores the original purpose of the PSRO program, which was to evaluate the quality of care rendered in the nation's hospitals. The council does stay in contact with the regulatory agencies and periodically submits written comment on proposed regulation.

Conclusion and Recommendations:

The council proposes no major changes in its programs for next year. In the event the Medicare Demonstration Project receives sufficient support to justify a major legislative effort, the chairman of the ad hoc committee may be required to make one or more trips to Washington.

Budget Request

\$13,500.00*

Respectfully submitted,
Perry A. Lambird, MD

Chairman

Richard J. Boatsman, MD

Ed L. Calhoon, MD

Charles D. Cook, MD

J. M. Dilling, Jr., MD

Mrs Camille Harrison

William L. Hughes, MD

Mrs Ellie Idstrom

Mrs Veronica Montero

Mr John H. Montgomery

C. T. Thompson, MD

Lanny F. Trotter, MD

Walter H. Whitcomb, MD

*Does not include salary and expenses of our Washington consultant.

APPENDIX A

To The

OSMA Council on Governmental Activities

MEDICARE DEMONSTRATION PROJECT

Second Draft

Second Draft — March 13, 1984

98th Congress
1st Session

H. R. _____

In the House of Representatives

Mr. EDWARDS of Oklahoma introduced the following bill; which was referred to the Committee on _____

A BILL

To authorize the Secretary of Health and Human Services to conduct a demonstration project of the use of stay-well bonuses and large annual deductibles under the medicare program.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) the Secretary of Health and Human Services is authorized, either directly or through grants to public or nonprofit private agencies, institutions, and organizations or contracts with public or private agencies, institutions and organizations, to develop and engage in a demonstration project meeting the requirements of subsection (b) to determine whether such a project will result in savings to the medicare program.

(b) The demonstration project shall be meet the following requirements:

(1) Except as otherwise provided in this subsection, the project shall be conducted in accordance with the provisions of section 1876 of the Social Security Act by an entity that is an eligible organization under subsection (b) of such section under a risk-sharing contract described in subsection (g) of such section.

(2) (A) Under the project, before any benefits are payable to beneficiaries through the organization there shall be a single annual deductible in lieu of, and in an amount in excess of the sum of, the inpatient hospital deductible under section 1813 of the Social Security Act and the part B supplemental medical insurance deductible under section 1833(b) of such Act. Otherwise, the project shall provide for at least the same benefits as are otherwise available under parts A and B.

(B) Under the project, there shall be a limit on the total out-of-pocket expenses a beneficiary may incur in any year for services covered under parts A and B.

(3) Only individuals who reach age 65 years of age after the date the project begins and who are entitled to benefits under part A and enrolled under part B may participate in the project. Participation in the project is voluntary and may be terminated by the participant only annually during a voluntary termination period or, for good cause, at other times during the year.

(4) The annual per capita rate of payment by the Secretary to the project for classes of participants shall be equal to 100 percent of the adjusted average per capita cost for that class (as defined under section 1876(a)(4) of the Social Security Act).

(5) Paragraphs (2), (3) (other than subparagraph (D) thereof), and (6) of subsection (c), subsection (e) (other than paragraph (4) thereof), and subsection (f) of section 1876 of the Social Security Act shall not apply to the project and, for the purposes of subsection (g)(3) of such section, payments of a stay-well bonus (described in paragraph (6) of this subsection) or of amounts into a trust account (described in paragraph (7) of this subsection) shall be considered to be additional benefits referred to in subsection (g)(2) of that section.

(6) If no claim for payment is submitted by a participant for services covered under part A or part B of title XVIII of the Social Security Act during a year, the project shall pay the participant a stay-well bonus in an amount not to exceed \$200. The amount of any such payment shall not be subject to taxation under the Internal Revenue Code of 1954.

(7) The project [may]/[shall] provide for the deposit, in a trust account insured by the Federal Government in any depository institution and established for each participant in the project, of amounts which are not used in a year for payments for health care services under the project (and reasonable administrative costs of operating the project and stay-well bonuses described in paragraph (6)) respecting that participant. In accordance with rules established under the project, amounts may be withdrawn from such a participant's account in a subsequent year for additional services for that participant in subsequent years or to make payment towards the participant's single annual deductible described in paragraph (2)(A). Any amounts not so withdrawn by the end of the project shall be deposited into the respective Trust Funds established under title XVIII of the Social Security Act in such proportions as the Secretary determines to be appropriate.

The Secretary may waive compliance with the requirements of title XVIII of the Social Security Act insofar as such waiver is necessary to conduct the demonstration project.

(c) Grants, payments under contracts, and other expenditures made for the demonstration project under this Act shall be made in appropriate part from the Federal Hospital Insurance Trust Fund (established by section 1817 of the Social Security Act) and the Federal Supplementary Medicare Insurance Trust Fund (established by section 1841 of such Act). Grants and payments under contracts may be made either in advance or by way of reimbursement, as may be determined by the Secretary, and shall be made in such installments and on such conditions as the Secretary finds necessary to carry out the purposes of this Act. The amount to be paid from each of the trust funds shall be determined by the Secretary, giving due regard to the purposes of the project.

(d) The Secretary shall report to the Congress not later than five years after the date of the enactment of this Act on the demonstration

project under this Act, on savings under the medicare program achieved through the project, and on the feasibility and advisability of extending the terms of such a demonstration project to all medicare beneficiaries.

Report of the COUNCIL ON STATE LEGISLATION

Reference Committee III

Subject: Annual Report

Presented by: William L. Hughes, MD, Chairman

Referred to: Reference Committee III

The 1984 legislative session was predicted to have been so involved with budget problems that there would be little time to deal with medical issues. The prediction turned out to be false as the deadline for bill introduction revealed some nine bills that would have given certain limited licensed practitioners an expanded role of practice. Six of the bills were defeated due in part to pressure exerted by the OSMA membership through phone calls and letters to state legislators. Two of the bills (dietitians and occupational therapy) were amended favorably and put under the jurisdiction of the State Board of Medical Examiners. One bill was passed into law. The optometrists were able to get their bill signed by the Governor which allows them the right to prescribe medicines. This is dangerous legislation — our voice of opposition was heard but not heeded.

There were another five bills that dealt with the issue of insurance payment mechanisms (HMOs, PPOs) for certain limited licensed practitioners. After much debate and a lot of confusion, two of the five bills were amended and passed.

A list of the bills and their ending status is contained in this report. All in all the Legislative Council monitored some 32 bills.

As physician members of the Oklahoma State Medical Association, you are to be commended for your time in responding to legislative alerts by contacting your legislators. The State Legislative Council has given a great deal of time and assistance to this effort during bi-weekly meetings. I conclude by encouraging all Oklahoma medical doctors to join OMPAC. We could do much better with more involvement in legislative campaigns. Membership in OMPAC is a small price to pay to protect our profession.

Respectfully submitted,
William L. Hughes, MD, Chairman
Stephen E. Acker, MD
Thomas C. Alexander, MD
Richard M. Bregman, MD
Hugh M. Conner, Jr., MD
Raymond L. Cornelison, Jr., MD
Billy D. Dotter, MD
Sam L. Earnest, MD
Robert S. Ellis, MD
William E. Harrison, Jr., MD
Mark R. Johnson, MD
William P. Jolly, MD
Perry A. Lambird, MD
Joan K. Leavitt, MD

Larry L. Long, MD
 Charles B. McCall, MD
 Lee N. Newcomer, MD
 Nolen Armstrong, MD
 Jack D. Powell, MD
 Lawrence A. Reed, MD
 George F. Short, Esq.
 Joseph W. Stafford, MD
 Jerry B. Vannatta, MD
 Walter H. Whitcomb, MD
 Edgar W. Young, Jr., MD
 Veronica Montero
 Ellie Idstrom

**REPORT A of the
 COUNCIL ON STATE LEGISLATION**

Reference Committee III

Subject: Formation of a Citizens Council
 Presented by: William R. Hughes, MD, Chairman
 Referred to: Reference Committee III

Our council has discussed at a number of its meetings the association's inability to adequately communicate its position on federal and state legislative

issues to the general public and particularly to business and community leaders. There is ample evidence to prove that when the practice rights of limited practitioners are expanded by legislation, the overall quality of medical care goes down and the price goes up.

Virtually the same is true of federal initiatives. Conventional wisdom predicts that the Prospective Pricing System using Diagnosis Related Groupings will result in a denial of necessary care to certain patients and overpayments to hospitals on others. Further ramifications are legion. Already hospitals are announcing major layoffs of personnel, and some hospitals are in danger of closing. The general economic setbacks coupled with restrictive federal policy could cause an economic recession within the medical care industry.

The OSMA has excellent public relations and legislative programs, but we do not have a broad based constituency sufficient to repeal some of the major public policy changes that could have a deep and disastrous effect on more than direct patient care.

The council has no quick and simple solutions to this communication problem, but we feel some structured dialogue with business and community leaders might be helpful. Perhaps these discussions would offer businessmen the opportunity to discuss their

**STATUS OF SENATE BILLS
 April 24, 1984**

The following is a list of some of the more important pieces of legislation being monitored by the Oklahoma State Medical Association:

Bill #	Subject	OSMA Position	Status
SB 253	Multi-Phasic health screening	Support	Dead
SB 413	Discourage frivolous lawsuits; providing punitive damage	Support	Dead
SB 425	Require health insurance cover for newly born children, transportation necessary for delivery of medical care	Support	Signed by Gov
SB 434	Require health maintenance organizations include services rendered by a podiatrist	Opposed	Signed by Gov
SB 435	Define preferred provider organizations and regulate their development and operation	Opposed	Dead
SB 446	Establish a board to certify marriage & family therapists	Opposed	Dead
SB 484	Require health insurance contracts include expenses incurred in connection with the treatment of mental illness	Monitor	Dead
SB 510	Require health insurance policies include coverage for mental illness comparable to other forms of illness	Monitor	Dead
SB 530	Would redefine LMHP to include Masters degree in Social Work for purpose of evaluating mental competency	Monitor	Dead
SB 557	Would create committee of occupational therapy under the Board of Medical Examiners which would license occupational therapists	Monitor	Signed by Gov
SB 558	Would create alcohol & drug dependency credential board; would certify qualified applicants as accredited alcohol & drug counselors	Monitor	Dead
SB 559	Create office of child abuse prevention within State Department of Health	Support	In Conference
SJR 54	Would direct alcohol & drug abuse prevention authority to create committee on standards for alcohol & drug professions	Monitor	Dead

corporate medical problems with the association, and we in turn would explain our concerns over legislative intrusions into the practice of medicine.

Recommendation:

The Board of Trustees is authorized to establish within the association structure a council of citizens who would meet with the association leadership once or twice a year to discuss health policy in Oklahoma.

STATUS OF HOUSE BILLS April 24, 1984

The following is a list of some of the more important pieces of legislation being monitored by the Oklahoma State Medical Association:

Bill #	Subject	OSMA Position	Status
HB 1470	Physician to report suspicious injuries inflicted on a patient that appear to be caused by criminal conduct	Support	Signed by Gov
HB 1550	Requiring physician approval before child reported with head lice can return to school/amended to authorize school nurses or other authorized employees to dispense non-prescription medication to students with parent approval.	Monitor	Substitute bill returned to House & Senate
HB 1574	Remove certified registered nurse anesthetists (CRNA), direct immediate supervision by a licensed physician	Opposed	Dead
HB 1598	Use of unclaimed animals for scientific investigation and education	Support	Dead
HB 1635	Would remove references to practice of medicine as grounds for revocation or suspension of a license of any chiropractor	Actively Opposed	Dead
HB 1705	Would allow physical therapists to practice independently without physician referral	Opposed	Dead
HB 1720	Would define all insurance policies to include HMOs, nonprofit HNA corporations, PPOs	Opposed	Signed by Gov
HB 1743	Would prohibit hospitals from charging or accepting payments from third-party payers for hospital services at a reduced rate or price differential	Neutral	Dead
HB 1751	Define preferred provider organization (PPO) or any other kind of prepaid health care organization within HMO statutes; provide inclusion of chiropractic, optometric, and psychological services	Opposed	Dead
HB 1760	Direct Commissioner of Mental Health to establish a program to provide comprehensive in-patient & out-patient mental health care & treatment for deaf & hearing impaired	Monitor	Dead
HB 1787	Require health insurance contracts cover expenses incurred in connection with treatment of mental illness	Monitor	Dead
HB 1802	Establish the State Indigent Health Care Act	Support	House rejects Senate Amendment & requests conference
HB 1812	Establish Clean Indoor Air Act	Support	Dead
HB 1821	Provide licensing & regulation of dieticians under Oklahoma State Board of Medical Examiners	Monitor	Signed by Gov
HB 1822	Perinatal care act	Neutral	Dead
HB 1834	Include optometry in pharmacy acts and allow them to prescribe drugs & medicines	Actively Opposed	Signed by Gov
HB 1851	Oklahoma Clean Air Act	Monitor	Dead
HB 1922	Establish "Licensed Professional Counselors Act"	Monitor	Dead
HB 1047	Would expand Medicaid coverage & increase hospital benefits	Monitor	Dead

Report of the COUNCIL ON MEDICAL SERVICES

Reference Committee III

Subject: Annual Report

Presented by: John A. Blaschke, MD, Chairman

Referred to: Reference Committee III

Introduction:

The council has been charged with the duties of studying and making decisions and formulating activities with respect to provisions of accurate medical care, including but not limited to the design of evaluation of all types of health care delivery systems, health planning, the financing of medical services and its impact on the quality of patient care, the social aspects of health, internal peer review mechanism, and the appraisal of all external programs which affect the cost and quality of medical care.

Review of Activities:

A. Appropriateness Review Committee—Last year the House of Delegates adopted Resolution 18 which instructed the association to begin conducting peer review for both appropriateness of care and fees. The council continued its appropriateness review but withheld review of fees in light of the anticipated settlement, by the AMA, of the Federal Trade Commission lawsuit. Even with the lack of actual fee review, the council adjudicated 40 cases over the last twelve months.

B. Physician Placement—Directing physicians to rural Oklahoma, or any underserved area, is a priority of the OSMA, but it is the main activity of the Oklahoma Physician Manpower Training Commission. The OSMA, over the past eight years, has supported the PMTC for several reasons. (1) The "blueprint" for the PMTC is a program the OSMA had some ten years ago, a rural community scholarship program. (2) By law, the OSMA is represented on the PMTC. Three of the five physician members are active OSMA members: C. S. Lewis, Jr., MD, Tulsa; William D. Dotter, MD, Okeene, current chairman; and Francis Hollingsworth, MD, El Reno. (3) The PMTC aids the OSMA in physician placement, because they have the most up-to-date information on community needs and physicians looking to relocate. (4) The primary care residents' salaries are paid through the PMTC, and since about three years ago, for the first time, thanks to the PMTC budget, there have been enough residency slots in Oklahoma to keep all primary residents in state.

For 1984 the commission is financially supporting medical and osteopathic students as follows:

(1) Rural Loan and Scholarship Fund — 44 students have obligations to practice in Oklahoma communities with populations of 7,500 or less. (2) Community-Match Loan and Scholarship Program — 15 students have matched with communities, 50% of the funding from the state and 50% from the community.

Since the beginning of PMTC, 238 students have enrolled in scholarship programs and the rate in having the students return to serve out their debt is very good, approximately 75%.

C. Single State Medicare Reimbursement — Two years ago the OSMA went on record in support of a single statewide reimbursement zone for Oklahoma. This concept was begun by the Oklahoma Health Systems Agency and eventually got the support of the Oklahoma State Legislature. However, once the federal government received the request, they calculated that it would cost approximately three million dollars a year in order to change Oklahoma from five reimbursement zones to a single state reimbursement zone, even though we argue that an additional three million dollars broken down per month is only approximately 1% increase to the Health Care Financing Administration's budget. Here we are two years later and the request has been passed around from department to department and no one will make the final decision. It is our hope that the decision in favor of changing to a single state reimbursement zone will be forthcoming and will be implemented by July of 1985.

Recommendations:

1. The Appropriateness Review Committee will continue its activities.
2. Continue support for the Physician Manpower Training Commission and its physician placement program.
3. The OSMA continue to support and actively encourage changing Oklahoma to a single statewide Medicare reimbursement area.

Budget Requests:

Council meeting expenses	\$ 500.00
Other council objectives and educational opportunities	1,000.00
Total	\$1,500.00

Respectfully submitted,
John A. Blaschke, MD, Chairman
Ronald S. Barlow, MD
A. Paul Compton, MD
Donald L. Cooper, MD
Kurt Frantz, MD
Maurice C. Gephardt, MD
Bartis M. Kent, MD
John T. Keown, Jr., MD
Ray V. McIntyre, MD
Edwin E. Rice, MD
John C. Sacra, MD
Robert C. Troop, MD
Orange Welborn, MD
Kenneth E. Whinery, MD
Rebecca Worrell, MSII
Richard N. Ernest, Staff

Report of the COUNCIL ON MEMBER SERVICES

Reference Committee III

Subject: Annual Report

Presented by: William O. Coleman, MD, Chairman

Referred to: Reference Committee III

Introduction:

It is the responsibility of the Council on Member Services to monitor and develop programs that offer direct benefits to physicians as a result of their membership in OSMA. These include a variety of sponsored insurance programs — including the successful professional liability coverage through PLICO, PLICO's Health Insurance, Group Life Insurance, Hospital Indemnity Insurance, Disability Income Insurance, Workers' Compensation Insurance, full time accident insurance, business overhead expense insurance, and a disability insurance program for student members.

Additionally, the council supervises the OSMA-sponsored tours and offers numerous other programs each year for OSMA members. In addition, the council is available to assist county medical societies, the OSMA Auxiliary, and resident and medical student organizations.

The council is also charged with the responsibility of supervising and maintaining the underwriting program for professional liability insurance through PLICO. This is a contracted function between the OSMA and the PLICO Management Company, C. L. Frates, Inc.

Review of Activities:

Workers' Compensation:

Following the 1983 Annual Meeting of the House of Delegates, the council was authorized to offer a new insurance plan to OSMA members. The Dodson Insurance Group was authorized to offer workers' compensation insurance to OSMA members at a reduced premium. Their insurance, underwritten by Casualty Reciprocal Exchange, is the official OSMA workers' compensation policy.

One of the concerns expressed by the last House of Delegates was that many Oklahoma physicians might not realize that they are required by state law to carry workers' compensation insurance on their office employees. Upon offering the Dodson workers' compensation policy it was discovered that this fear was well-founded. Many physicians contacted the medical association asking if they needed this type of coverage.

New Employee Seminars:

Two seminars for new medical office employees were sponsored by the council in 1983-84. The purpose of the seminars is to familiarize new medical

office employees with the legal and ethical aspects of the doctor-patient relationship and to give them some background information on medical education, medical ethics, physician-hospital relationship, financing medical care, and working with patients.

The seminars were held on February 15 and 16 in Tulsa and Oklahoma City respectively.

Ed Kelsay, OSMA legal counsel, served as instructor for the seminars. A fee of \$50 per person was charged to offset the cost of the seminars and to pay for the educational materials that were distributed. Approximately 40 medical office employees took advantage of the offering.

AMA-GTE Telenet:

The American Medical Association's nationwide computerized medical information program, Telenet, continues to grow and expand. It will be offered to Oklahoma physicians this summer and the function will be supervised by the Council on Member Services.

In preparation for offering the program, your council has surveyed all Oklahoma physicians in order to develop a list of those that already have a computer that is compatible with the Telenet System. For these physicians it will only be necessary to install (if they do not already have one) what is known as a telephone modem in order to access the national data base. For physicians without computer capability it will be necessary to procure a computer terminal and a telephone modem.

The Telenet system makes available to physicians five major data bases of medical information: disease information, drug information, current procedural terminology information, socioeconomic bibliography information, and medical-clinical bibliography information with an abstract service. In addition, there is a nationwide computerized mail service allowing any physician on the system to contact any other physician on the system using Med-Mail.

AMA and GTE have announced their intention of developing a special program that will allow physicians to file insurance and Medicare claims directly to the company or carrier utilizing the Telenet system.

Computer Conference:

October 4, 1983, your council participated in the Southwest Computer Conference in Tulsa, Oklahoma, by offering a half-day program on the use of a computer in a medical office. The conference was actually three days long, October 4-6, in Tulsa's Assembly Center and featured over 200 exhibits from computer hardware and software companies.

OSMA's portion was conducted on Tuesday morning by Ed Kelsay, OSMA legal counsel. In keeping with the council's policy of attempting to make each program self-sustaining, a fee of \$25 per person was charged.

DRG Brochure:

With the coming of the Diagnosis Related Groups (DRGs) reimbursement system for hospitals, your

council felt it important to attempt to explain DRGs and their importance to OSMA physician members. A brochure entitled "A New Reimbursement System," an explanation of DRGs, was purchased from the Minnesota Medical Association in sufficient quantity to be mailed to all Oklahoma physicians.

This four-page brochure explains what DRGs are, how they affect the individual physician's practice, some of the major features of the DRG legislation, and a pro and con explanation of DRGs.

The brochure was distributed to all OSMA members in late 1983.

Contracting Alert:

A special edition of the OSMA newsletter was published by the council on physician contracting. Entitled "Contracting Alert," the purpose of the newsletter was to explain to physician members of the OSMA the importance of carefully reading any PPO or HMO contract submitted to them for signature.

While the OSMA is forbidden by the Federal Trade Commission and the various antitrust acts to take any position regarding PPOs or HMOs, it does have the right and duty to inform physician members about possible contract pitfalls.

It is anticipated that other special issues of the newsletter will be published in the future on this same subject.

Hospital Medical Staff Council:

This council, in conjunction with the Council on Medical Services, jointly formed a special ad hoc committee to study the creation of a special Hospital Medical Staffs Council within the OSMA's council structure.

All state medical associations are being urged by the American Medical Association to recognize, in some appropriate manner, the importance of hospital medical staffs. The AMA has even created a special Hospital Medical Staff Section that's entitled to voting representation in the AMA's House of Delegates.

The OSMA's special ad hoc committee has recommended that a new Council on Hospital Medical Staffs be created through a change in the OSMA bylaws. An appropriate bylaws amendment has been drawn up and approved by the association's Constitution and Bylaws Committee.

Purpose of the new council will be to allow direct input from hospital medical staffs to the association's activities. It shall establish and maintain a communications liaison with organized hospital medical staffs, develop policy recommendations regarding medical staff relations for consideration by the association, and establish and maintain appropriate relations with federal and state government entities having statutory or regulatory jurisdiction affecting medical staffs.

It is the recommendation of this council that the association bylaws be amended to provide for the creation of the new council.

OSMA Sponsored Insurance:

(Statistical reports on each of the association's vari-

ous insurance plans will be presented to the OSMA House of Delegates at the May meeting.)

The OSMA sponsors eight different insurance programs of interest to physicians. Two of them, professional liability and PLICO Health, are wholly owned by the association through the Physicians Liability Insurance Company. The others are sponsored by the association in some manner.

Workers' Compensation Insurance

In 1983, the association began sponsoring the Workers' Compensation Insurance Program written by Casualty Reciprocal Exchange, a member of the Dodson Insurance Group. This program was advertised to all members of the state medical association with a reminder that under the workers' compensation amendments of a few years ago, it is necessary for all physician offices to have this type of coverage for their employees. There are approximately 200 offices carrying this coverage.

Group Term Life

The association's Group Term Life Program offers coverage from \$25,000 up to \$300,000 for the physician and his spouse, and from \$10,000 to \$100,000 for the employee of the physician. As of mid-March, 1984, there were approximately 265 lives insured through this program.

In late 1983, the Group Term Life Program was moved from the former carrier to the Continental Insurance Company and administration of the program was changed over the C. L. Frates and Company. The number of insureds since the changeover has continued to grow.

Disability Income

There are 452 lives insured under the association's Disability Income Program. The purpose of this type of insurance is to offset the physician's loss of income due to sickness or disability.

The association's program is extremely flexible with a large number of options available, including an accidental death benefit, a dismemberment benefit, etc.

Recovery can be purchased to start in 45 days, 3 months, 9 months, or 12 months following a disability.

Overhead Expense Program

If a physician does become disabled, not only does his income stop, but his overhead continues. This type of coverage allows the physician to keep his office open until he can return to work or until it can be closed in an orderly fashion.

At the present time there are 239 lives insured under this program, up from 225 in 1982.

Benefits are available in increments of \$100 up to \$5,000 a month maximum.

Hospital Indemnity

This program pays a specified amount per day

Proceedings *(continued)*

whenever an insured is a patient in the hospital. Up to 365 days of benefits are available from \$20 to \$100 per day. It can include the association member, spouse, and family.

Accidental Death and Dismemberment

This program provides benefits from \$25,000 to \$100,000 for accident loss of life and a portion thereof for accidental loss of limb, eyesight, speech, or hearing. The protection is 24 hours a day no matter where the person is.

Underwriting Review:

The most important function carried out by the Member Services Council this administrative year has been the conduct of the annual Underwriting Review for the association-owned Physicians Liability Insurance Company (PLICO).

The underwriting plan for PLICO requires that each year the association's Council on Member Services review all claims, settlements, or judgments to determine whether or not there is a pattern of losses that could be prevented through an underwriting or loss prevention mechanism.

Although the underwriting plan has called for an "annual" review since the company was founded in January, 1980, the methodology to conduct such a review has not existed until this year. In order to carry out the review, the council met on January 7th and 29th, February 12th and 26th, and March 11th. Each time there was a full day meeting that resulted in a total review of 144 claim files involving 70 physicians.

The council requested from PLICO's management company, the names of physicians who have experienced three or more professional liability claims since January 1, 1980, and a second list of physicians' names who were involved during the same period in claims paid or reserved at \$100,000 or more. Therefore, the review system followed was confined to an assessment of physicians who were identified by frequency and/or severity measurements.

Following the review of each physician and/or claims set, the council would determine whether to pass the claims through without action, to collectively formulate underwriting recommendations regarding the individual physician, or, in a number of cases, to write directly to the physician involved for additional information.

The report of the council's activities regarding underwriting was submitted to the PLICO Board of Trustees, along with numerous recommendations regarding individual physicians, at its meeting on March 18.

Now that the methodology is available, it is anticipated that the "annual" underwriting review will take place at an appropriate time each year. In addition, this first review is not totally complete at this time. Several physicians selected by the frequency and severity screens will continue to be monitored by the council and additional recommendations may be forthcoming.

It is the council's intention to meet at least four times each year so that it can exercise its responsibility to provide an on-going underwriting review service on a case-by-case basis. Additionally, it is the council's intention to carefully restudy the underwriting plan currently being followed and to make appropriate recommendations for future changes.

Sponsored Tours:

For many years the association has sponsored tours through the INTRAV Corporation. This is one of the most respected tour operators in the United States working primarily through professional associations representing medical doctors, bankers, lawyers, CPAs, etc.

The association recovers all of its expenses for promoting tours from INTRAV Corporation and is thus able to make them available to physician members at no cost to the association. One of the interesting things about the INTRAV tours is that they are made up from several different states and usually contain an excellent cross section of other professionals.

In 1983-84 the association sponsored the following tours:

1983

Canyonlands of America (June)
Dutch Waterways (June)
Main River (July)
Colonial South Air/Sea Cruise (October)
Danube River Adventure (November)

1984

Caribbean Air/Sea Cruise (January)
South Pacific (March)
Spain/Portugal Adventure (May)
Dutch Waterways (June)
Orient-Express Adventure (July)
Europe/Oberammergau Passion Play (July)
Mediterranean/Greek Isles Air/Sea Cruise (Sept)
Danube River Adventure (October)

Respectfully submitted,
William O. Coleman, MD,
Chairman
Richard A. McKinne, MD,
Vice-Chairman
William G. Bernhardt, MD
Tim S. Caldwell, MD
E. Edwin Fair, MD
Joe Ray Hamill, MD
Joe S. Hester, MD
George H. Jennings, MD
Robert A. McLauchlin, MD
Jack P. Myers, MD
Don G. Nelson, MD
Francis D. Oakes, MD
Paul O. Shackelford, MD

Report of the OKLAHOMA MEDICAL POLITICAL ACTION COMMITTEE

Reference Committee: III

Subject: Annual Report
Presented by: William Leebron, MD, Chairman
Referred to: Reference Committee III

The board of the Oklahoma Medical Political Action Committee will meet during the 1984 Annual Meeting on Friday, May 11, 1984 at 2:00 PM. All OMPAC members are invited to attend.

The key dates for the 1984 election year are as follows:

Candidate filing is July 9-10-11
Primary election on August 28
Runoff election on September 18
General election on November 6

As of April 26, 1984 the OMPAC membership is as follows:

Regular Members (\$50)	438
Sustaining Members (\$100)	9
"200" Club Members	<u>18</u>
TOTAL MEMBERSHIP	465

The following is a breakdown of the Sustaining and "200" Club Members:

Sustaining

Joseph Salamy, MD, Tulsa
David Fell, MD, Tulsa
William Bernhardt, MD, Midwest City
Clarence Robison, MD, OKC
Carl H. Guild, MD, Bartlesville
Thomas N. Lynn, MD, OKC
Nancy W. Dever, MD, Chickasha
Tim Smalley, MD, Stillwater
Vernon Vix, MD, Chickasha

"200" Club

Joseph Stafford, MD, Enid
John McIntyre, MD, Enid
James D. Funnell, MD, OKC
Orange Welborn, MD, Ada
George Kamp, MD, Tulsa
William L. Hughes, MD, OKC
Michael Haugh, MD, Tulsa
Ed L. Calhoon, MD, Beaver
Elvin Amen, MD, Bartlesville
Victor Robards, MD, Tulsa
William Leebron, MD, Elk City
James B. Eskridge III, MD, OKC
Floyd Miller, MD, Tulsa
Raymond Cornelison, MD, Midwest City
Jodie Edge, MD, Norman
David Bickham, Edmond
Ed Kelsay, OKC
Lyle Kelsey, Edmond

The financial report as of April 26, 1984 is as follows:

(an independent audit is being requested)	
Hard Dollars (available for campaign contributions)	\$25,421.18
Soft Dollars (Educational fund)	95.45

The OMPAC board will be electing new members

to the board due to the congressional redistricting and fill vacancies.

Mrs. Glo Henley, OMPAC secretary-treasurer, has submitted her resignation due to her heavy work commitments. OMPAC would like to extend its appreciation to Glo for an exemplary job and wish her the very best in her future endeavors.

The OSMA Auxiliary is in the proces of finding a replacement to fill the secretary-treasurer position.

Lyle Kelsey has resigned from OSMA effective April 1, 1984. Lyle has served very ably as staff to OMPAC and has agreed to stay with this position through the 1984 election year to ensure continuity. The OMPAC board is appreciative of his efforts with OMPAC and his willingness to stay on through the year. We extend best wishes in his new career.

Report of the PHYSICIANS COMMITTEE

Reference Committee III

Subject: Annual Report
Presented by: Ted Clemens, Jr., MD, Chairman
Referred to: Reference Committee III

On Saturday, February 11, 1984, the OSMA Physicians Committee met to develop operational guidelines for the committee to be presented to the OSMA Board of Trustees at the annual meeting. The committee heard from Doyle Smith, MD, an anesthesiologist from Hattiesburg, Mississippi, who is the director of the Pine Grove Recovery Center in Mississippi that works with impaired professionals. Several years ago Dr Smith indicated he was an impaired physician by reason of abuse of alcohol and now quickly identifies the problems that most state medical societies have in dealing with physicians who are substance abusers. Dr Smith was very informative and helpful to the committee in evaluating the need for an impaired physician program in Oklahoma.

Dr Ted Clemens, committee chairman, expresses his appreciation to the committee members who have been very diligent in attendance of Saturday meetings for their dedication and hard work.

The OSMA Physicians Committee submits the following proposal to the OSMA Board of Trustees for approval.

The OSMA Physicians Committe believes that the problem of impaired professional performance among physicians is the responsibility of the medical profession and specifically of the Oklahoma State Medical Association. To meet this need, the committee recommends that the OSMA Board of Trustees approve the establishment and operation of a new committee called the Physician Recovery Committee to replace the Physicians Committee. The purpose and operation of the Physician Recovery Committee are as follows:

Purpose

1. To establish a statewide noncoercive advocacy program for locating, contacting, and offering re-

habilitative help to physicians whose professional competency has become impaired because of alcoholism and chemical dependence.

2. To continue to work in liaison with State Board of Medical Examiners.

3. To establish programs of education and prevention concerned with alcoholism and other chemical dependence.

4. To educate, identify, verify, intervene, direct to treatment, and evaluate for re-entry into the active profession.

General Principles

Regarding the impaired physician, the Oklahoma State Medical Association subscribes to the following principles:

1. The association is motivated in this area by humanitarian concern for the public and the impaired physician and his family.

2. The association is further motivated by the economic impact to the citizens of Oklahoma resulting from the loss of a fully trained physician, and is concerned about the erosion of the public's trust which follows our failure to intervene.

3. The association recognizes that alcoholism and other chemical dependence are forms of impairment that must not be hidden, ignored, or untreated in physicians.

4. The association recognizes that alcoholism and chemical dependency are treatable diseases.

5. The association favors treatment and/or rehabilitation of impaired medical doctors above any other alternative.

6. The association encourages any physician capable of recognizing his or her impairment to seek help and cooperate in treatment by all means at the disposal of the association's Physician Recovery Committee.

7. The association favors early intervention in cases of physician impairment while personal, financial, mental, and physical resources are intact and minimum damage has been done to professional reputation or to the public.

8. All action taken by the association's Physician Recovery Committee on behalf of the impaired physician will be done in such a manner as to preserve the physician's right to resume practice without restriction or stigma upon recovery or re-entry.

9. All actions taken in the area of impaired physicians by the association are intended to be in the best interest of the physician and the public.

10. Referral to the association's Board of Trustees by the Physician Recovery Committee will be considered when the impaired physician's actions endanger the public or himself and the impaired physician repeatedly refuses assistance from the committee. Upon referral, the association's Board of Trustees will handle the situation according to the judicial authority stipulated in the Constitution and Bylaws, Chapter 5, Sections 7.03 through 7.035.

Structure

To be effective, the impaired physician program must have the active, unqualified support of the state association. The Physician Recovery Program of the Oklahoma State Medical Association will encompass the entire state of Oklahoma and be administered by the association. Existing mechanisms within local medical societies will be integrated and utilized by the statewide program. The Physician Recovery Committee will:

1. Broadly publicize the Physician Recovery Program and direct an educational effort to physicians and their families, hospital staffs, county medical societies, auxiliaries, and others to communicate the general principles of the program and solicit cooperation.

2. Establish a registry of effective resources in the areas of alcoholism and chemical dependence. This registry will be continually updated and will serve as the basis for referral and evaluation.

3. Supply pertinent information concerning the disease of alcoholism and chemical dependence and knowledgeable referrals for effective treatment.

4. Confirm allegations of physician impairment.

5. Appoint a director to develop overall policies and guidelines regarding the implementation and maintenance of the physician recovery program.

6. Assist the director with administrative functions including fiscal management.

7. Make recommendations to the association's Board of Trustees regarding any impaired physician who has failed to achieve an acceptable degree of rehabilitation after receiving maximum help from the Physician Recovery Committee.

Legal Issues

The OSMA Physician Recovery Committee will review the AMA booklets on model legislation concerning impaired physicians and compare that to the Oklahoma Statutes for any discrepancies or omissions. Recommendations regarding legislation needed to modify the Oklahoma Statutes in facilitating the Physician Recovery Program will be referred to the OSMA Legislative Committee for possible action.

Budget

The proposed budget is submitted to the OSMA Board of Trustees for approval:

Meetings (once a quarter)	\$ 500
Travel (county medical societies)	1,000
Director	15,000
TOTAL PROPOSED BUDGET	\$16,500

Respectfully submitted:

Ted Clemens, Jr., MD, Chairman
Donald L. Brawner, MD
Ted J. Brickner, Jr., MD
Raymond L. Cornelison, Jr., MD
Jim C. Couch, MD
Boyd K. Lester, MD
James R. Rhymer, MD
Charles J. Shaw, MD
J. Darrel Smith, MD
Mark R. Johnson, MD

**Oklahoma
State Medical Association
House of Delegates**

Resolution: 3
(Adopted)

Introduced by: OSMA Board of Trustees
Subject: Voluntary Fee Freeze
Referred to: Reference Committee III

WHEREAS, The Board of Trustees of the American Medical Association has issued an appeal to all America's physicians to voluntarily freeze fees for one year; and

WHEREAS, The leadership of OSMA has made a similar request to all Oklahoma physicians; and

WHEREAS, State, county, and specialty medical organizations across the nation have voted to endorse the voluntary fee freeze; and

WHEREAS, A survey conducted by OSMA confirms that a vast majority (more than 95%) of Oklahoma physicians support a voluntary fee freeze; now therefore be it

Resolved, That the House of Delegates supports the voluntary fee freeze recommended by the AMA and encourages all physicians to abide by the freeze until March 1, 1985; and be it further

Resolved, That Oklahoma physicians continue to demonstrate their compassion and concern for the disadvantaged elderly and the unemployed by rendering necessary services without regard to ability to pay.

**Oklahoma
State Medical Association
House of Delegates**

Resolution: 4
(Not adopted)

Introduced by: Washington-Nowata County
Medical Society
Subject: Federally Financed Health Care Programs
Referred to: Reference Committee III

WHEREAS, It is imperative that all persons and organizations involved in providing health care for the people of this country perform their duties in a competent and frugal manner; and

WHEREAS, A certain portion of the funds for health care (ie, Medicare, Medicaid, CHAMPUS, Public Health Service) are spent for administrative purposes; and

WHEREAS, Furthermore, it is imperative that the major portion of health care funds be spent directly on health care for people and patients and that administrative cost be held to a minimum (less than 15%); now therefore be it

Resolved, That any company, bureau, or organization which spends more than 15% of its health care funds for administrative purposes be subjected to periodic review by a responsible monetary agency with the intent of correcting wasteful and irresponsible administrative practices. A reasonable goal of 15% should be enforced.

**Oklahoma
State Medical Association
House of Delegates**

Resolution: 7
(Not adopted)

Introduced by: Leon Horowitz, MD
Subject: Hospital Fee Freeze
Referred to: Reference Committee III

WHEREAS, The American Medical Association Board of Trustees by letter dated March 7, 1984 requested that physicians "voluntarily freeze fees for all patients for one year"; and

WHEREAS, Physicians fees account for less than 20% of total health care, and hospital costs account for 42% of health care; and

WHEREAS, Physicians agree that the cost of health care must be contained; now therefore be it

Resolved, That the Oklahoma State Medical Association requests that the American Hospital Association recommend that its member hospitals freeze their fees for one year as well.

**Oklahoma
State Medical Association
House of Delegates**

Substitute Resolution
(Adopted)

Introduced by: Reference Committee III
Subject: Stabilization of Charges
Referred to: OSMA House of Delegates

Resolved, That all entities involved in the delivery of health care display the same sensitivity to economic factors facing patients and respond by stabilizing their charges for one year as initiated by Oklahoma physicians.

**Oklahoma
State Medical Association
House of Delegates**

Resolution: 9
(Adopted)

Introduced by: Council on Public and
Mental Health
Subject: County Health Department Millage
Referred to: Reference Committee III

WHEREAS, The Oklahoma State Medical Association recognizes the great need and importance of local public health work in the state of Oklahoma; and

WHEREAS, There has been a drastically reduced federal funding of public health services, a high rate of unemployment, and a faltering of the Oklahoma economy; and

WHEREAS, There now exists a 2.5 mill ceiling for public health services in each county of the state of Oklahoma; and

WHEREAS, In some counties in Oklahoma the

Proceedings (continued)

maximum millage is being fully utilized; and

WHEREAS, Many public health programs have been reduced or eliminated and the maximum 2.5 mills is no longer sufficient for the present or particularly for planning for public health services in the near future; and

WHEREAS, The Oklahoma State Legislature has passed a Joint Resolution calling for a statewide election to change the Oklahoma State Constitution allowing each county in the state of Oklahoma to call an election to raise the maximum levy ceiling for County Health Departments to 5.0 mills from the present ceiling of 2.5 mills; now, therefore be it

Resolved, By the Oklahoma State Medical Association: That the Oklahoma State Medical Association actively support State Question No 561 providing for the county option for calling an election authorizing a 5.0 mill ceiling for County Health Department millage levy by:

1) The Oklahoma State Medical Association encouraging its membership to actively support State Question No 561.

2) The Oklahoma State Medical Association encouraging its members to vote for State Question No 561 when it appears on the state ballot August 28, 1984, and to seek support for State Question No 561 from their families, friends, staffs, and individual patients.

Oklahoma State Medical Association House of Delegates

Resolution: 12
(Not adopted)

Introduced by: Washington-Nowata County
Medical Society
Subject: Prospective Payment System
Referred to: Reference Committee III

WHEREAS, In an effort to control the rising costs of health care in our country, certain rules and regulations are being imposed by the Health Care Financing Administration on health care providers and vendors, known as the Prospective Payment System based on Diagnosis Related Groups; and

WHEREAS, These rules and regulations have been applied to civilian providers and vendors of health care; and

WHEREAS, Billions of taxpayers' (government) money are spent on federally operated health care facilities and staffing; and

WHEREAS, It would be fiscally prudent to have these federally operated vendors and providers of health care operate under the same rules and regula-

tions that apply to civilian health care facilities and programs; now, therefore be it

Resolved, That the Health Care Financing Administration apply a Prospective Payment System based on a Diagnosis Related Group program to all federally operated hospitals and facilities, including Army, Navy, Marine, Public Health Service, Veterans Administration, etc, with appropriate modifications.

Late Resolution Oklahoma State Medical Association House of Delegates

Resolution: 17
(Adopted as amended)

Introduced by: OSMA Board of Trustees
Subject: Medicare Attestation
Referred to: Reference Committee III

WHEREAS, The Health Care Financing Administration has promulgated regulations requiring the following statement on all Medicare claims:

"I certify that the identification of the principal and secondary diagnoses and procedures performed is accurate to the best of my knowledge. (Notice: Intentional misrepresentation, concealment or falsification of this information may, in the case of a Medicare beneficiary, be punishable by imprisonment, fine or civil penalty.)"; and

WHEREAS, Professional Review Organizations were notified of the regulatory requirement in early February with instructions that the rule be implemented effective February 13; and

WHEREAS, It is arbitrary, capricious, and unreasonable to expect conformance with the regulations on the date they were published; and

WHEREAS, Legitimate Medicare claims seeking payment for services rendered prior to March 1 are being denied without the right of appeal; and

WHEREAS, Existing Medicare fraud and abuse statutes protect the government against fraudulent claims; now therefore be it

Resolved, That the House of Delegates declares the Medicare Attestation arbitrary, unnecessary, and unfair; and be it further

Resolved, That the Oklahoma Congressional Delegation be asked to petition the Department of Health and Human Services and its Health Care Financing Administration to rescind the regulation; and be it further.

Resolved, That the American Medical Association House of Delegates be requested to encourage members of the Federation to petition the members of their respective congressional delegations to encourage that HHS and HGFA repeal the regulations.—

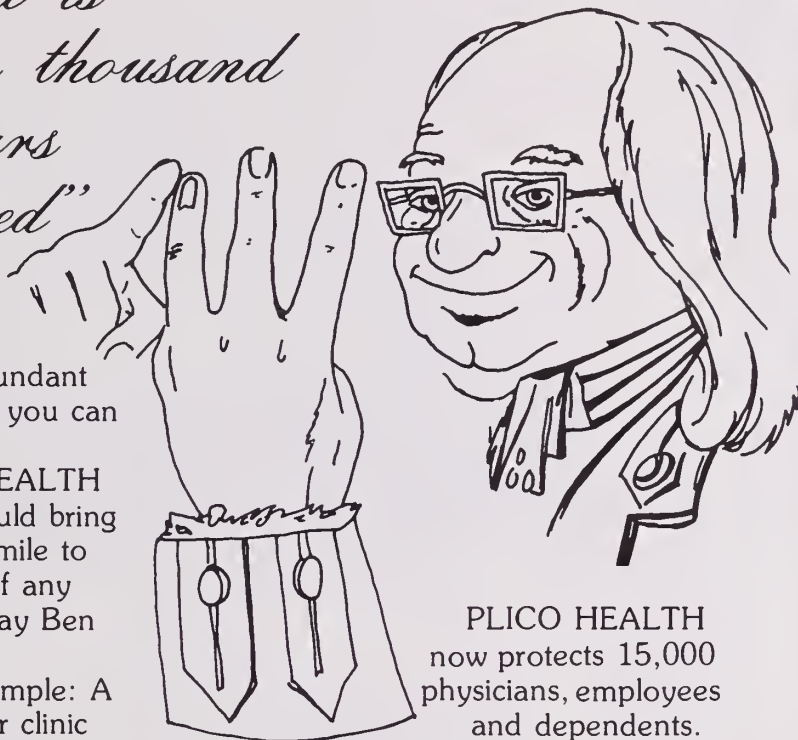
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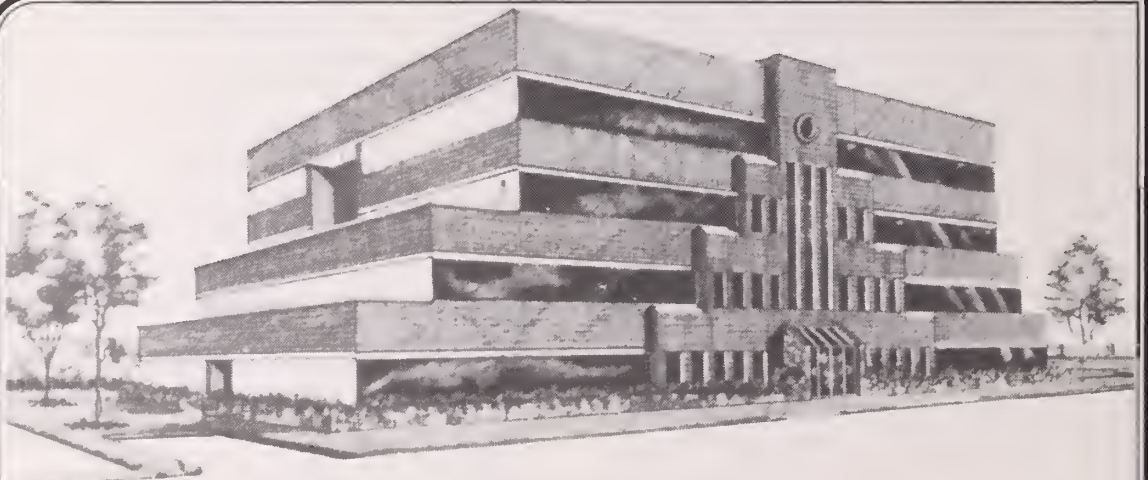
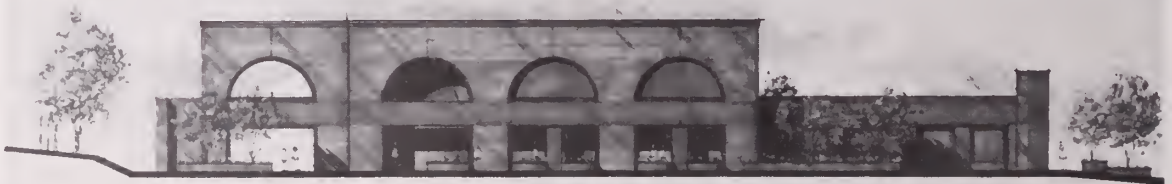


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balances
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coronary
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with a low
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side effects

Low incidence of side effects
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*Cardizem is indicated in the treatment of angina pectoris due to coronary artery spasm and in the management of chronic stable angina (classic effort-associated angina) in patients who cannot tolerate therapy with beta-blockers and/or nitrates or who remain symptomatic despite adequate doses of these agents.

References:

1. Strauss WE, McIntyre KM, Parisi AF, et al: Safety and efficacy of diltiazem hydrochloride for the treatment of stable angina pectoris: Report of a cooperative clinical trial. Am J Cardiol 49:560-566, 1982.
2. Pool PE, Seagren SC, Bonanno JA, et al: The treatment of exercise-inducible chronic stable angina with diltiazem: Effect on treadmill exercise. Chest 78 (July suppl):234-238, 1980.

Reduces angina attack frequency*
42% to 46% decrease reported in multicenter study¹

Increases exercise tolerance*
In Bruce exercise test,² control patients averaged 8.0 minutes to onset of pain; Cardizem patients averaged 9.8 minutes ($P < .005$).

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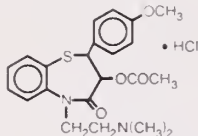
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PROFESSIONAL USE INFORMATION



DESCRIPTION

CARDIZEM® (diltiazem hydrochloride) is a calcium ion influx inhibitor (slow channel blocker or calcium antagonist). Chemically, diltiazem hydrochloride is 1,5-Benzothiazepin-4(5H)-one, 3-(acetoxy)-5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-(4-methoxyphenyl)-, monohydrochloride, (+)-cis-. The chemical structure is:



Diltiazem hydrochloride is a white to off-white crystalline powder with a bitter taste. It is soluble in water, methanol, and chloroform. It has a molecular weight of 450.98. Each tablet of CARDIZEM contains either 30 mg or 60 mg diltiazem hydrochloride for oral administration.

CLINICAL PHARMACOLOGY

The therapeutic benefits achieved with CARDIZEM are believed to be related to its ability to inhibit the influx of calcium ions during membrane depolarization of cardiac and vascular smooth muscle.

Mechanisms of Action. Although precise mechanisms of its antianginal actions are still being delineated, CARDIZEM is believed to act in the following ways:

1. **Angina Due to Coronary Artery Spasm:** CARDIZEM has been shown to be a potent dilator of coronary arteries both epicardial and subendocardial. Spontaneous and ergonovine-induced coronary artery spasm are inhibited by CARDIZEM.
2. **Exertional Angina:** CARDIZEM has been shown to produce increases in exercise tolerance, probably due to its ability to reduce myocardial oxygen demand. This is accomplished via reductions in heart rate and systemic blood pressure at submaximal and maximal exercise work loads.

In animal models, diltiazem interferes with the slow inward (depolarizing) current in excitable tissue. It causes excitation-contraction uncoupling in various myocardial tissues without changes in the configuration of the action potential. Diltiazem produces relaxation of coronary vascular smooth muscle and dilation of both large and small coronary arteries at drug levels which cause little or no negative inotropic effect. The resultant increases in coronary blood flow (epicardial and subendocardial) occur in ischemic and nonischemic models and are accompanied by dose-dependent decreases in systemic blood pressure and decreases in peripheral resistance.

Hemodynamic and Electrophysiologic Effects. Like other calcium antagonists, diltiazem decreases sinoatrial and atrioventricular conduction in isolated tissues and has a negative inotropic effect in isolated preparations. In the intact animal, prolongation of the AH interval can be seen at higher doses.

In man, diltiazem prevents spontaneous and ergonovine-provoked coronary artery spasm. It causes a decrease in peripheral vascular resistance and a modest fall in blood pressure and, in exercise tolerance studies in patients with ischemic heart disease, reduces the heart rate-blood pressure product for any given work load. Studies to date, primarily in patients with good ventricular function, have not revealed evidence of a negative inotropic effect; cardiac output, ejection fraction, and left ventricular end diastolic pressure have not been affected. There are as yet few data on the interaction of diltiazem and beta-blockers. Resting heart rate is usually unchanged or slightly reduced by diltiazem.

Intravenous diltiazem in doses of 20 mg prolongs AH conduction time and AV node functional and effective refractory periods approximately 20%. In a study involving single oral doses of 300 mg of CARDIZEM in six normal volunteers, the average maximum PR prolongation was 14% with no instances of greater than first-degree AV block. Diltiazem-associated prolongation of the AH interval is not more pronounced in patients with first-degree heart block. In patients with sick sinus syndrome, diltiazem significantly prolongs sinus cycle length (up to 50% in some cases).

Chronic oral administration of CARDIZEM in doses of up to 240 mg/day has resulted in small increases in PR interval, but has not usually produced abnormal prolongation. There were, however, three instances of second-degree AV block and one instance of third-degree AV block in a group of 959 chronically treated patients.

Pharmacokinetics and Metabolism. Diltiazem is absorbed from the tablet formulation to about 80% of a reference capsule and is subject to an extensive first-pass effect, giving an absolute bioavailability (compared to intravenous dosing) of about 40%. CARDIZEM undergoes extensive hepatic metabolism in which 2% to 4% of the unchanged drug appears in the urine. In vitro binding studies show CARDIZEM is 70% to 80% bound to plasma proteins. Competitive ligand binding studies have also shown CARDIZEM binding is not altered by therapeutic concentrations of digoxin, hydrochlorothiazide, phenylbutazone, propranolol, salicylic acid, or warfarin. Single oral doses of 30 to 120 mg of CARDIZEM result in detectable plasma levels within 30 to 60 minutes and peak plasma levels two to three hours after drug administration. The plasma elimination half-life following single or multiple drug administration is approximately 3.5 hours. Desacetyl diltiazem is also present in the plasma at levels of 10% to 20% of the parent drug and is 25% to 50% as potent a coronary vasodilator as diltiazem. Therapeutic blood levels of CARDIZEM appear to be in the range of 50 to 200 ng/ml. There is a departure from dose-linearity when single doses above 60 mg are given; a 120-mg dose gave blood levels three times that of the 60-mg dose. There is no information about the effect of renal or hepatic impairment on excretion or metabolism of diltiazem.

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM

is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).

2. Chronic Stable Angina (Classic Effort-Associated Angina).

CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance. There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in *in vitro* bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%),

headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following events were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System:	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensitivity.
Other:	Polyuria, nocturia.

The following additional experiences have been noted:
A patient with Prinzmetal's angina experiencing episodes of vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme, leukopenia, and extreme elevations of alkaline phosphatase, SGOT, SGPT, LDH, and CPK. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CARDIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered:

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed high-degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

The oral LD₅₀'s in mice and rats range from 415 to 740 mg/kg and from 560 to 810 mg/kg, respectively. The intravenous LD₅₀'s in these species were 60 and 38 mg/kg, respectively. The oral LD₅₀ in dogs is considered to be in excess of 50 mg/kg, while lethality was seen in monkeys at 360 mg/kg. The toxic dose in man is not known but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSEAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, before meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

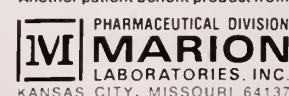
1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy**—CARDIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

Cardizem 30-mg tablets are supplied in bottles of 100 (NDC 0088-1771-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1771-49). Each green tablet is engraved with MARION on one side and 1771 engraved on the other. CARDIZEM 60-mg tablets are supplied in bottles of 100 (NDC 0088-1772-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1772-49). Each yellow tablet is engraved with MARION on one side and 1772 on the other.

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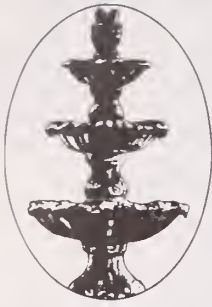
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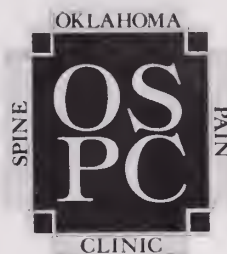
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REPRINTS

Authors will receive reprint order forms from the Transcript Press, PO Drawer 1058, Norman, Oklahoma 73070, prior to final publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

BACK ISSUES

Microfilm copies of back issues of *The Journal* may now be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

Madam President, honored guests, officers, delegates, fellow auxiliaries, and friends. Several years ago an acquaintance asked me to join a group of individuals for coffee. Little did I know that that conversation would lead to my presence here today.



For you see, that group of individuals was the Kay-Noble County Medical Auxiliary, and the acquaintance was not only a member, but an OSMA Auxiliary past president. That coffee led to another, then a fund raiser, then another project, and before I knew it I was involved with an organization of volunteers with a wide range of personal interests, backgrounds, educations and life-styles, but with one common bond — that of being a doctor's spouse. We also shared the same purpose — to improve the health of our community. I know that this story is familiar. Most of you began the same way.

Since that day I have grown as an individual and as an auxiliary. And, as all our past state presidents, my concerns did not stop at the county level, but led me on to my involvement in state auxiliary activities.

This past year it has been my honor and my privilege to work closely with our president, Camille Harrison. She has been a kind, caring, and able president. I know that I speak for the entire membership in thanking you, Camille, for your fine leadership and your accomplish-

ments in the interest of auxiliary.

Now, as I accept this gavel, I realize that the responsibility of leadership is placed in my hands. I accept that responsibility with the confidence that officers and members alike will share the responsibility with me and we will strive to continue the high standards that have been set for us.

May I tell you how sincerely I appreciate the honor you have given me in electing me your president. I prize it and will do everything in my power to merit your confidence. And when my term is up—or may I say when *our* term is up, for we shall be a team working together, we hope you, the members, will want to say, as you can well say to our predecessors, "Well done, thou good and faithful servants."

Before I close, I want to recognize one person who has encouraged and supported me in anything I have ever attempted. He is always there with a shoulder to lean on, or a phone call when I'm far from home. He has listened to my ramblings, sometimes late into the night. He has given me a smile when I've needed it, or a pat on the back. He is the star of my life — my husband, Ellis.

Our convention is almost at an end. And to each of you let me say, go back to your communities — shake hands with fellow auxiliaries. Encourage those that are not members to join and get involved. We must unite for a common goal — to improve the quality of health and life for all people!

—Pam Oster

■ **The Oklahoma Teaching Hospitals** have received a three-year accreditation from the Joint Commission on Accreditation of Hospitals. This is the first time that the teaching hospitals have received accreditation as one hospital. Previously, Oklahoma Memorial Hospital, Oklahoma Children's Memorial Hospital, the Child Study Center, and the O'Donoghue Rehabilitation Institute have been accredited separately.

■ **The voluntary fee freeze** is being supported by 80% of the nation's physicians, AMA President-Elect Joseph F. Boyle, MD, reports. "This doesn't mean that American doctors are simply not increasing their income but that they are losing \$9,000 to \$12,000 a year because their overhead is going up while their fees remain the same," Dr Boyle told a press conference this spring. The AMA's one-year moratorium will reduce the nation's medical bills by \$3.5 million, or 1% of the total, he said.

■ **An AMA opinion poll** reveals that more young Americans (age 18 to 34) than elderly (those 65 and over) thought that the elderly were unable to get needed medical care. They also thought that society did not provide enough financial support for the elderly.

■ **The percentage of female physicians** in the US increased from 7.7% to 12.2% during the period 1970 to 1981, the American Medical Association reports. Nearly 30% of today's medical students are women. While female physicians constituted 12.2% of all physicians, they made up smaller percentages of general/family practitioners (8.9%) and surgeons (5.6%), and larger percentages of medical and other specialists (15.4% and 15.1% respectively). The women averaged 64% of the average annual net income of their male colleagues, with part of the difference being attributable to differences in hours practiced, specialty, and form of practice. Income-per-hour calculations show the women earning 75.6% of the men's income.

■ **The American Medical Association Constitution and Bylaws** were amended during the recent House of Delegates meeting to reward states with a high percentage of membership in the AMA. The change means two additional AMA delegates for the OSMA. Oklahoma is now the tenth largest delegation to the AMA. The two new seats will be filled by former alternate delegates Orange M. Welborn, MD, Ada, and James B. Eskridge III, MD, Oklahoma City. Michael J. Haugh, MD, Tulsa, has been appointed to one of the vacant alternate delegate positions. Other new alternates will be named before the AMA Interim Meeting in December. Formal election of delegates will occur at the OSMA Annual Meeting in May, 1985.

■ **Women can appreciably decrease the risk** of contracting gonorrhea by using spermicides in conjunction with either diaphragms or condoms, according to results of a case-control study appearing in the *Journal of the American Medical Association (JAMA)*. Conducted by Harland Austin, DSc, of the University of Alabama in Birmingham, and colleagues, the study included 735 women with gonorrhea and 958 controls. "An overall reduction of 33% in gonorrheal risk among women using spermicides relative to nonusers is suggested by this study," the researchers say.

■ **An injury to Richard M. Nixon's left knee** on August 17, 1960, may have played a major role in his presidential defeat that year, comments Raymond Scalettar, MD, in *JAMA* recently. The injury led to a hospital admission 12 days later with a diagnosis of septic arthritis. Released on September 12, Nixon was readmitted to the hospital five days later with a raging fever. "His fatigue, weight loss, and general poor physical appearance would be visible to all during the famous presidential debate of Monday evening, September 26, 1960," Scalettar says. Many have suggested that Nixon's narrow loss to John F. Kennedy was due to that televised debate.

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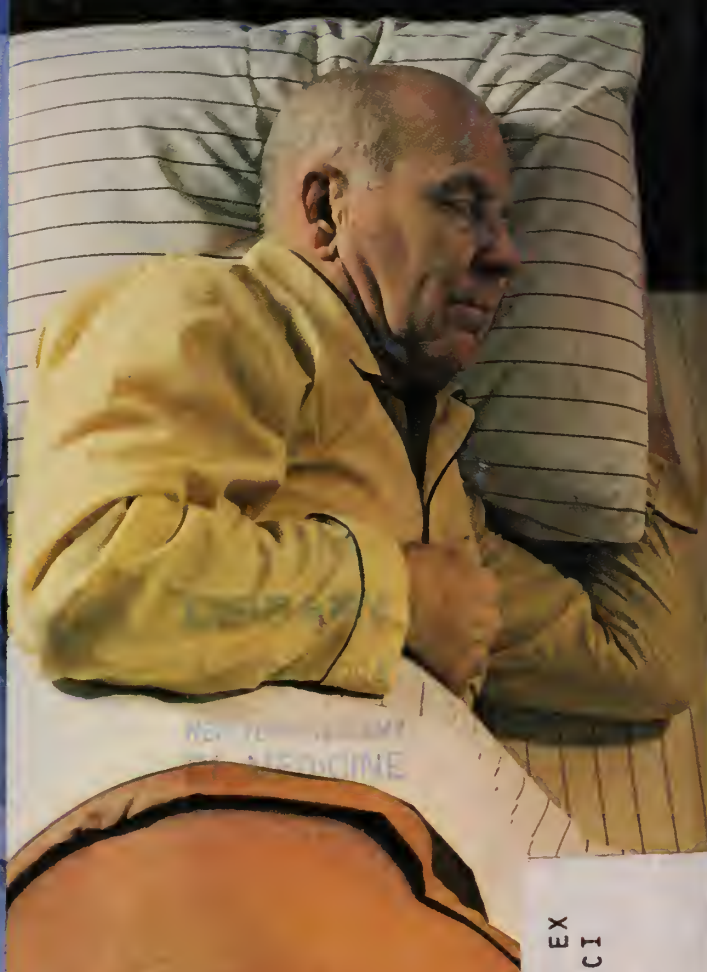


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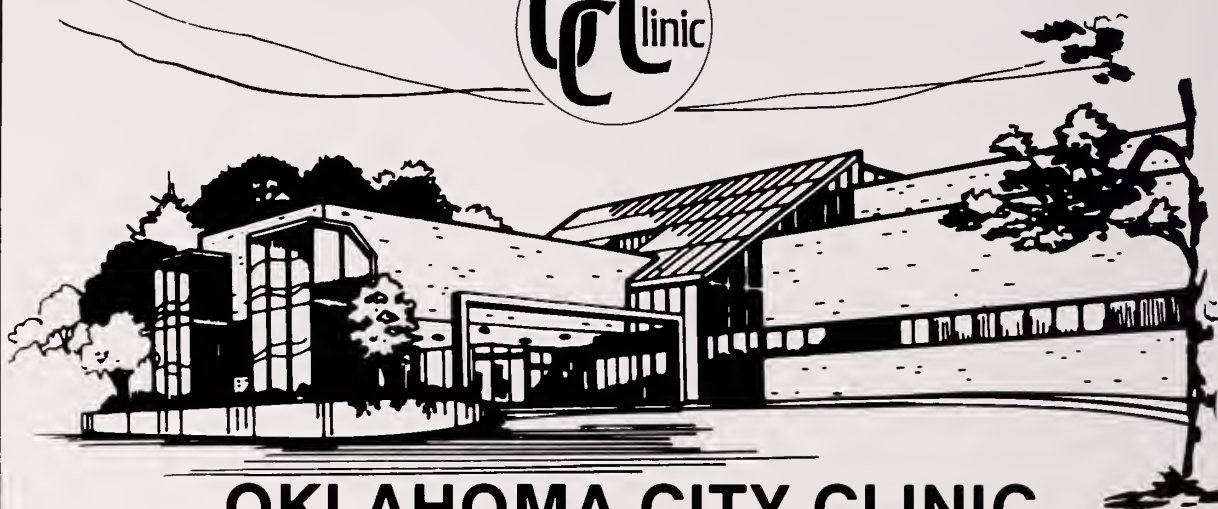
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Staffed by volunteer specialists—an internist, a dermatologist, a gynecologist and a surgeon—and one salaried secretary to handle the record-keeping, the recycled vehicle left Oklahoma City and headed north. Its first stop was Tonkawa,^{1,2} where advance publicity had drawn women from nearby towns, farms and reservations, all seeking the proffered examinations.

Cooperative effort

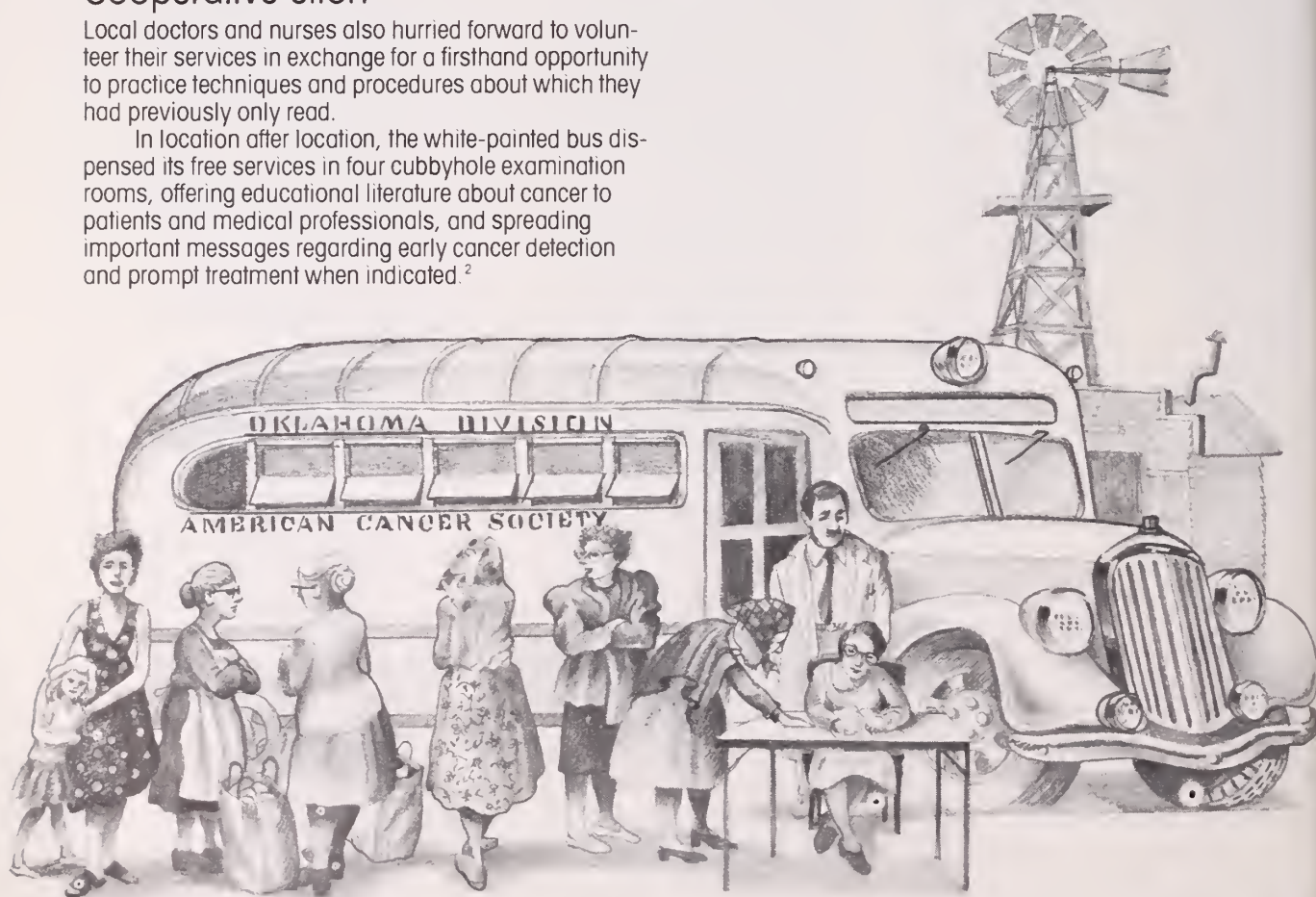
Local doctors and nurses also hurried forward to volunteer their services in exchange for a firsthand opportunity to practice techniques and procedures about which they had previously only read.

In location after location, the white-painted bus dispensed its free services in four cubbyhole examination rooms, offering educational literature about cancer to patients and medical professionals, and spreading important messages regarding early cancer detection and prompt treatment when indicated.²

The idea caught on

Today, it is not surprising to see a modern medical services vehicle on wheels in shopping-center parking areas, schoolyards or business centers. Community service organizations sponsor and support them all across the country. Unquestionably, they have come a long way in equipment and comfort from the school bus that pioneered vital health services... but *it* was the bus that made medical history.

References: 1. Kane JN. *Famous First Facts*, 3rd ed. New York, The H. W. Wilson Co., 1964, p. 367. 2. Data on file, Hoffmann-La Roche Inc., Nutley, NJ.



When the history reveals mixed depression and anxiety...

For the estimated 70 percent of nonpsychotic depressed patients who are also anxious,¹ Limbitrol provides both amitriptyline, specific for symptoms of depression, and the effects of Librium® (chlordiazepoxide HCl/Roche), the tested and dependable anxiolytic. Limbitrol is, therefore, a better choice for these patients than dual agents that contain a phenothiazine, a class of antipsychotic drugs which has been associated with tardive dyskinesia.

62% of Overall Improvement...Within the First Week

Limbitrol also has a rapid onset of action which may lead to greater patient compliance. In a multicenter study, patients taking Limbitrol experienced 62% of their overall improvement within the first week of therapy.²

In another multicenter study,³ the following symptoms associated with anxious depression were significantly reduced during the first two weeks of therapy:

- ☐ Headache—79%
- ☐ Early insomnia—91%
- Middle insomnia—87%
- Late insomnia—89%
- ☐ Gastrointestinal upset—73%

In two multicenter studies, only 1.9% of Limbitrol patients experienced cardiovascular side effects.³

Patients should be cautioned about the combined effects with alcohol or other CNS depressants and about activities requiring complete mental alertness such as operating machinery or driving a car.

References: 1. Rickels K. Drug treatment of anxiety, in *Psychopharmacology in the Practice of Medicine*, edited by Jorvik ME; New York, Appleton-Century-Crofts, 1977, p. 316. 2. Feighner JP et al. *Psychopharmacology* 61: 217-229, Mar 1979. 3. Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

In moderate depression and anxiety

Limbitrol®

Tablets 5-12.5 each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)

Tablets 10-25 each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt)

LIMBITROL® Tablets (Tranquilizer-Antidepressant)

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of moderate to severe depression associated with moderate to severe anxiety

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use; then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.

Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage; withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).

Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated, sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs.

Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke

Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido

Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns

Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract

Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus

Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia

Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue

Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion.

Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling

Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single h.s. dose may suffice for some patients. Lower dosages are recommended for the elderly.

Limbitrol 10-25, initial dosage of three or four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol 5-12 5, initial dosage of three or four tablets daily in divided doses, for patients who do not tolerate higher doses.

How Supplied: White, film-coated tablets, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) and blue, film-coated tablets, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500, Tel-E-Dose® packages of 100, Prescription Paks of 50.

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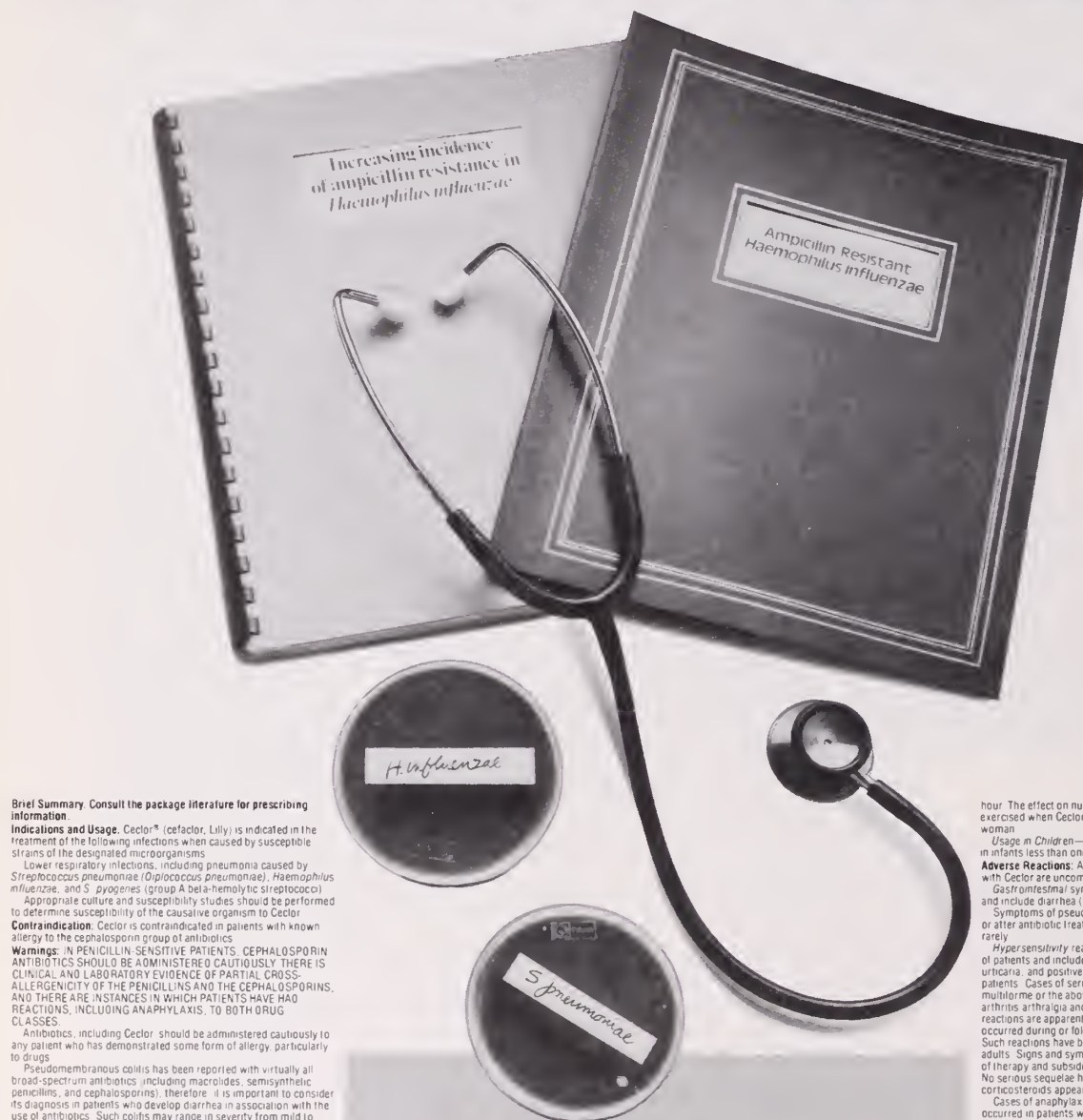
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The Journal of the Oklahoma State Medical Association (USPS 285-000)

An added complication... in the treatment of bacterial bronchitis*



Brief Summary. Consult the package literature for prescribing information.

Indications and Usage. Ceclor® (cefalor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae* (*Diplococcus pneumoniae*), *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci). Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication. Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings. IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins), therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions. General Precautions.—If an allergic reaction to Ceclor occurs, the drug should be discontinued, and if necessary the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when anti-globulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinistix® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly). Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy—Pregnancy Category B.—Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response this drug should be used during pregnancy only if clearly needed.

Nursing Mothers.—Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one

Some ampicillin-resistant strains of *Haemophilus influenzae*—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.¹⁻⁶

In clinical trials, patients with bacterial bronchitis due to susceptible strains of *Streptococcus pneumoniae*, *H. influenzae*, *S. pyogenes* (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.⁷

Ceclor®

cefalor

Pulvules®, 250 and 500 mg

hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor® (cefalor, Lilly) is administered to a nursing woman.

Usage in Children.—Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis, arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy. Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain.—Transient abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic.—Slight elevations of SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic.—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal.—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

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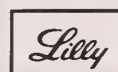
* Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.
Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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Cryomania

Have you ever had the feeling that you have lost all your ability to comprehend, understand, rationalize? If not, I congratulate you. It's a bad feeling. I know. I experienced it several weeks ago and I am not yet fully recovered. I fear I'm out to lunch and I'm not real sure that I'm coming back.

This state of dementia developed abruptly and has terrified me with its persistence. As I recall, it appeared while I was reading a news story about the new federal law which freezes Medicare fees for fifteen months.

Ever since that horrible moment I have felt my mind slipping away. There have been a few times when I caught glimpses of sanity but they faded quickly.

I have tried repeatedly to identify the cause of my infirmity. All my efforts have failed however, and I am forced to conjecture and speculate.

Climatic shock, maybe. I suppose I wasn't ready for a freeze in July, especially one that is to last fifteen months. The idea might have shattered my biorhythms and thrown the circuit breaker in my attic wiring.

Or maybe a severe identity crisis. I can't decide whether I'm participating or non-participating, coming or going. Such indecision is bound to have an unsettling effect, even on the soundest mind. And mine was not the soundest.

Could be I'm having a phobic reaction. I have never been charmed by the prospect of achieving notoriety and the threat of having my name and address published in a list of participating physicians has undoubtedly stirred up these deep fears. My suspecting nature, honed by years of diligent bureaucrat watching, tells me that another list showing the names, addresses *and* phone numbers — to facilitate Baby Doe type calls — of non-participating physicians will also be prepared. Instead of being mailed to all Medicare beneficiaries, this list probably will be posted in police stations and post offices around the country. I wonder if each name will be accompanied by the usual full face and profile mug shots. Don't know

whether I'm holding my breath or hyperventilating, but I do know I'm getting weak and sweaty.

I haven't totally discarded the thought that I am suffering from acute depression. Remembering that no good deed goes unpunished, I regret my recent foolhardiness in volunteering to freeze my fees for twelve months. Now able to recognize my reprehensible greed, I am filled with remorse. I am ashamed of my selfishness and I deserve to be depressed. My wife and children are depressed too.

Severe frustration also has to be considered among the causes of my decompensation. I've been sending money away to generate some favorable political action for a good number of years now and if this is what I've been buying, I've already got a whole lot more than I can afford. 'Course lots of people remind me that if I hadn't helped our friendly politicians, I'd be a lot worse off. But if this is the way our friends treat us, surely we don't need more of them. And with elections coming up I don't know who to vote for. It's really frustrating. However, if the cost of health care continues to rise, by November all us physicians who receive Medicare funds might not be allowed to vote anyway.

There is the possibility that I've been watching too much television. Maybe I have a severe video neurosis which has precipitated a sort of panic reaction in me. There's a lot of violence on the tube these days and every time some actor hollers "freeze!" it gets my attention. Invariably the one hollerin' has a gun pointing with dead aim at someone else. It's enough to cause a lot of anxiety. Especially when you realize that if you don't freeze you can be robbed, fined, and jailed for asking your patient to pay you what you think your services are worth. If that realization doesn't trigger a panic reaction in you, you're dead.

All things considered, the concept of this freeze in this heat is difficult to grasp. My struggle to do so may have induced a new form of mental illness. Before I'm shipped off to some rest farm, I'd like to suggest a name for my psychosis.

How does the word "CRYOMANIA" sound to you?
— MRJ

TO BE, OR NOT TO BE *a participating physician . . .*

That *IS* the question!

Whether it is nobler to accept the enticements of (a) being allowed to increase billed charges to Medicare beneficiaries . . . these *additional* charges to be reflected in future screen updates . . .

(b) be eligible to receive additional incentives to *participate* . . . perhaps quicker turnaround times on Medicare claims, listing in directories of *participating* physicians or other carrots yet to be suggested in directives, regulations, et al, in return for surrender of yet another freedom of choice (100% acceptance of assignment) and another constraint ("customary and prevailing" charges frozen at the current level from July 1, 1984 to September 30, 1985) — **THOSE** are the questions.

The alternatives would seem to be several:

- (1) be a "nonparticipating physician," or
- (2) be a nonparticipant regarding treatment of people in the Medicare program.

Before the *second* alternative is rejected as being unfeeling, uncooperative, unprofessional, or whatever other "un" you can think of, look at the conditions under which the *first* alternative, the nonparticipating physician, would be expected to conform!



First . . . the good news . . . "physicians who do not elect to 'participate' would continue to have the option of assigning claims on a claim-by-claim basis" (budget reconciliation language). Then the bad news . . . "nonparticipating' physicians who increase their actual fees to Medicare beneficiaries during the 15-month freeze period" . . . this makes the freeze **MANDATORY** . . . "we'd be subject to *penalties ranging from civil monetary penalties to exclusion* from the Medicare program for a specified period of time"; a "three-month period starting after February 1984" has been promulgated for judging noncompliance "based on individual fee profiles."

Decide for yourself based on these earlier pronouncements and the law, as finally enacted. But **BEWARE** (and be wary) of the implementing regulations . . . especially how binding a physician's *first* choice of category will be, specific penalties for noncompliance and other potential traps, yet unpublished, to be avoided.

I know not what course others may take, but as for me . . . I intend to exercise the decision of assignment as long as it remains viable and without unacceptable terms.

[Handwritten signature] Seidgel III, M.D.

New Glaucoma Treatments

WAYNE F. MARCH, MD
LONNA YEARY
JOHN STOW

Timolol eyedrops have produced death in asthmatic patients as a systemic side effect. Betaxolol, a selective beta-1 blocker, is currently being tested in humans. Pilocarpine gel, a long acting form of pilocarpine, has been widely accepted by the patient population. Thirty-five patients participated in a clinical trial of pilocarpine gel applied once daily at 10:00 PM. Significant lowering of intraocular pressure was found for 24 hours after administration. Therefore, it appears that pilocarpine gel can be endorsed as an effective medication for 24 hours in the vast majority of patients.

Introduction

Timolol eyedrops have become the most widely utilized glaucoma medication in the past two years. However, only recently have the systemic effects been fully realized. Five deaths have been reported in asthmatic patients who were placed on timolol. Timolol, therefore, is relatively contraindicated in asthmatics, and

other medications are being developed. We are presently testing betaxolol, a selective beta-1 blocker, as illustrated in the figure. Our results so far show that betaxolol is as effective as timolol in the same concentration. However, betaxolol is far from approval by the Federal Drug Administration.

Another new form of an old medication is pilocarpine gel, and we have reported its successful use.¹ Pilocarpine gel has recently been approved by the Federal Drug Administration for general use. Pilocarpine eyedrops have been used for over a century to control glaucoma and have relatively few systemic side effects. However, their frequency of use (every six hours) has made it difficult for some patients, especially those patients on multiple eyedrop therapy. The pilocarpine gel is a sustained action pilocarpine. One quarter inch of the gel, which is similar to an ointment, is placed inside the lower eyelid at night. We have found this medication to be readily accepted (even demanded) by patients presently on pilocarpine therapy.

Many attempts have been made to administer pilocarpine in different vehicles to prolong eye contact time. Soft contact lens reservoirs² and conjunctival inserts³ have found limited usefulness. However, many patients still rely

This study was funded by Research to Prevent Blindness, Inc.

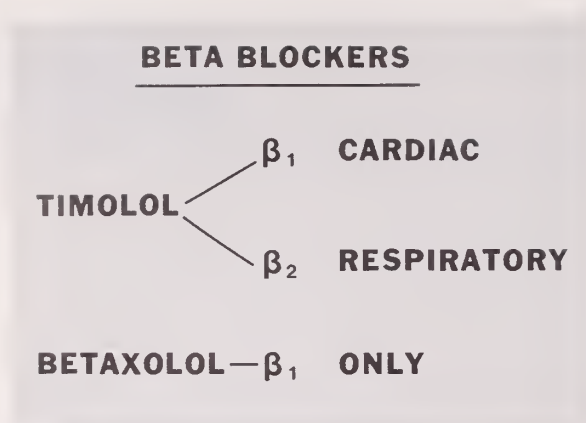


Fig. Systemic action of glaucoma eyedrops.

on self-administered topical pilocarpine hydrochloride drops four times daily. A single daily glaucoma therapy regimen would potentially increase patient drug compliance and decrease patient discomfort. Recently, a clinical study involving 15 patients showed that pilocarpine gel, pilocarpine hydrochloride in a high-viscosity acrylic vehicle, prolonged the effectiveness of pilocarpine for at least 18 hours and was well accepted by patients.⁴ The present study was designed to evaluate more carefully the duration of effectiveness for pilocarpine gel.

Subjects and Methods

Thirty-five subjects participated in this clinical study after giving informed consent. The demographic profile is shown in Table 1. These patients were selected from a larger patient population under the criteria of no recent history of ocular disease other than glaucoma or ocular hypertension, no previous ocular surgery, and receiving pilocarpine therapy only. At 10 AM on day 1 of the study, intraocular pressure (IOP) was measured with a Goldmann applanation tonometer. A 72-hour "wash-out" period followed, with no therapy. Control IOPs were recorded at 10 AM, 2 PM, 6 PM, and 10 PM on the fourth study day. Immediately after the 10 PM IOP measurement on the fourth day, 50 μ L of pilocarpine hydrochloride gel (2 mg of pilocarpine hydrochloride per 50 μ L of gel) was placed in the lower cul-de-sac of each eye by the clinician, using a quantitative applicator. This volume of pilocarpine gel is approximately equivalent to a 50- μ L drop of 4% pilocarpine hydrochloride solution (2 mg of pilocarpine hydrochloride per 50 μ L drop).

The IOP measurements were recorded at 10 AM, 2 PM, 6 PM, and 10 PM on the fifth and

sixth days, respectively, with a second pilocarpine hydrochloride gel application (50 μ L) being administered after the fifth study day's 10 PM IOP measurement.

Paired *t* tests were used to define statistical significance and only *P* values less than .05 were considered significant.⁵

Results

Table 2 demonstrates the side effects noted while receiving medication. Most patients preferred the gel to their present pilocarpine eye-drops.

A comparison between the IOP values before and after pilocarpine gel administration indicates a statistically significant reduction ($P < .001$) of the IOP measurements at each time interval recorded on the two respective test days (study days 5 and 6) (Table 3). It is also of interest that on study days 5 and 6 the 10 PM IOP measurements (19.36 and 19.53 mmHg, respectively) represent 24-hour values after the previous pilocarpine gel application.

Additionally, no apparent differences ($P > .05$) were detected in the IOP measurements between study days 5 and 6, except for the 2 PM IOP values ($P < .034$).

The IOP ratios (< 22 mmHg/ total) for the subjects on study days 4, 5, and 6 were compared (Table 3). A significant improvement in these ratios was seen with the gel exposure (range, 71.4% to 91.4% in a number of patients with IOP of 22 mmHg or less). There is no significant difference among the mean IOP values from 12

Table 1. — Study Population Demography

Feature	No.
Age, yr	
Mean \pm SD	66.6 \pm 7.9
Range	51.78
Sex	
M	12
F	23
Race	
White	15
Black	20
Iris color	
Brown	27
Hazel	2
Blue	4
Green	2
Ocular diagnosis	
Primary open angle glaucoma	33
Ocular hypertensive	2

Table 2. — Ocular Signs and Symptoms

Signs and Symptoms	First Day*	Second Day
Bulbar conjunctival inflammation	6	4
Limbal inflammation	2	0
Corneal epithelial disease	1	0
Lens change	0	0
Discomfort	8	3
Acute pain	0	0
Tearing	11	3

*Number of patients based on the 35 patients who exhibited the sign(s) and symptom(s) while receiving pilocarpine hydrochloride gel and not during the prestudy or washout examination.

to 24 hours (Table 3) after the pilocarpine gel application on either test day (study days 5 and 6). Conversely, variations in IOP values are apparent over the corresponding time interval on study day 4 (premedication IOP values).

Comment

The rationale for seeking a more efficacious delivery vehicle for pilocarpine administration stems from the problem that ophthalmologists often encounter in maintaining the patient with glaucoma or ocular hypertension on a long-term drug regimen.⁶ A poor patient drug compliance may be linked to discomfort associated with multiple drug applications, or simply failure to follow drug regimen.^{7,8} This point has been addressed by a recent clinical survey⁹ in which

84% of a patient population of 240 indicated they had experienced at least one of ten specific side effects (average, 3.1 per patient) while receiving pilocarpine, epinephrine, or a combination of the two agents.

Distinct advantages of pilocarpine being administered in a gel vehicle are (1) there is a more even time release of active drug, resulting in less ocular irritation or other side effects,¹⁰ (2) PM drug application reduces discomfort registered by the patient, and (3) drug compliance is enhanced because there are no multiple drug applications to disrupt daily routines or to be missed.

Drug efficacy and duration of effect are critical indices by which to judge the potential of any preparation that could be used in this manner. The results of our study support an earlier report that pilocarpine gel reduced IOP for 18 hours. Our data indicate that the duration of the pilocarpine gel efficacy is 24 hours. These data also suggest that the absolute IOP (ie, < 22 mmHg) in this group of patients was well controlled with the pilocarpine gel exposure. The IOP diurnal variations that were present on the premedication day were not observed on the two test days following pilocarpine gel exposure. The exaggerated IOP diurnal variations characteristic of the typical patient with glaucoma may be reduced with treatment by a single daily dosage of pilocarpine gel.¹¹

These data imply that, for the majority of patients, pilocarpine gel is an effective agent for 24 hours and requires only one dose daily, preferably in the evening. However, the practic-

Table 3. — Pilocarpine Gel 24-Hour Evaluation

Time	Day 4		Day 5		Day 6	
	Baseline IOP,* mm Hg	Ratio (%)†	IOP,* mm Hg	Ratio (%)†	IOP,* mm Hg	Ratio (%)†
10 AM (12 hr)‡	30.30	0/35(0.0)	19.59	25/35(71.4)	18.84	31/35(8.6)
2 PM (16 hr)	28.46	0/35(0.0)	19.90	27/35(77.1)	18.91	30/35(85.7)
6 PM (20 hr)	26.77	1/35(2.9)	19.91	28/35(80.0)	19.80	27/35(77.1)
10 PM (24 hr)	26.26	3/35(8.6)	19.36	32/35(91.4)	19.53	28/35(80.0)

*Mean value of intraocular pressure for 35 patients.
†Ratio of patients with IOP less than 22 mm Hg/total with percentage IOP less than 22 mm Hg for respective times.
‡Number of hours after pilocarpine hydrochloride gel administration in days 5 and 6.

ing ophthalmologist should remain aware that the effect of pilocarpine gel is weakest immediately before the next instillation. Therefore some patients, especially those who cannot tolerate a pressure of 22 mmHg or who have an unusual diurnal curve and manifest higher IOP in the evening, may require adjunct therapy. Any patient receiving pilocarpine gel should have at least one 10 PM IOP measurement while using the gel to assess the possible need for adjunct therapy.

Nancy Ryan, Director of Medical Illustration at McGee Eye Institute provided the Illustrations. Karen McNally-Spencer provided technical and secretarial assistance.

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The Little Editor

An irate physician, one known personally to the editor as an able and conscientious one, sent a clipping recently to the Journal from the editorial columns of the Vinita (Oklahoma) Leader, in which the director of the department of health and charities in Philadelphia claimed that many physicians in that city purposely prolonged cases of diphtheria in order to charge for more visits and suggests that an alleged custom from that most highly enlightened land, China, be adopted, where it is said fees are paid only so long as the patient is well.

Ordinarily such a mean little squib would be unnoticed, but bearing in mind the nature of this issue of the Journal* one cannot help but call attention to the falsity of the article and prove it by a comparison of its spirit and the movements of the last sixty days of the medical profession in Oklahoma.

The pen, paper, press; in fact everything in connection with the little editorial was made, marketed and used subject to patent regulations. Is the public charged any great sum

for the vaccination that protects it from smallpox? For the antitoxin that saves an infant's life? For any of the thousand and one improvements in medical and surgical treatment? No; it is freely given over to the saving of life, often without hope of reward.

It is fitting that some notice be taken in this particular issue of such a matter, even if it is small and otherwise not worthy of notice, but when you remember that every advancement of medicine is surely limiting the field of work and income of the physician, and that such advancement comes only through the labor of the physician himself and his unselfishly handing it over to the world, then one concludes that the spirit criticizing such a profession is small; too small entirely to notice.

— OSMA JOURNAL Editorial
February 1910

*The February 1910 JOURNAL contained eleven scientific papers on tuberculosis, all written by state physicians and presented before the First Anti-Tubercular Convention in Oklahoma City, January 10 and 11, 1910.

Jejunogastric Intussusception

JOSEPH L. SPANN, MD

Acute jejunogastric intussusception may present as a life-threatening emergency in persons having gastroenterostomy. Remaining alert to the possible occurrence of the rare condition is a prerequisite for its successful management.

Jejunogastric intussusception (JGI) is an uncommon but dangerous post-gastric surgery complication. It rarely occurs early postoperatively, but is usually diagnosed years following gastroenterostomy—with or without gastrectomy.

There are two distinct syndromes of jejunogastric intussusception: (1) **Acute:** Dramatic and fulminating, with persistent emesis followed by hematemesis, and accompanied by severe epigastric pain. (2) **Chronic:** This is a far more common but less well-defined syndrome of postprandial epigastric distress, often accompanied by nausea and weight loss.¹

Two cases of JGI, which contrast patients' age, indications for antecedent gastrectomy,

gastrectomy technique, and gastrojejunal anastomosis, are presented. Both were attended and operated by the author.

Case Presentation

Case Number One. An 85-year-old diabetic black woman presented with hematemesis six years after gastrectomy. Her original gastrectomy was a Billroth II anticolice Hofmeister gastrojejunostomy and truncal vagotomy performed for pyloric obstruction complicating a chronic active duodenal ulcer. Late postgastrectomy, she had several bouts of postprandial epigastric distress, occasional emesis, and weight loss. Interval upper GI series were nondiagnostic.

Three days prior to hospitalization, she had onset of unrelenting emesis and severe epigastric pain accompanied by hematemesis. An upper GI series showed: (1) Reflux of barium into esophagus, (2) large polypoid mass protruding into gastric pouch from the greater curvature border of gastrojejunostomy, and (3) dilated efferent small bowel (Figs 1 and 2).

Emergency laparotomy and anterior gastrotomy revealed strangulated jejunum in the stomach (Fig 3). After resecting the gangrenous bowel, the gastric pouch was halved by re-resection, the gastrojejunostomy was reduced in caliber, and small bowel continuity was restored by end-to-end jejunojejunostomy. The patient regained her original pre-gastrectomy weight and has remained well; she is now 90 years old.

(continued)

Jejunogastric (continued)

Case Number Two. A 36-year-old white woman had two gastrectomies performed for complicated ulcer disease a few months apart. The immediate indications for the first gastrectomy (a Billroth II anticolonic Polya gastrojejunostomy with truncal vagotomy) were unrelenting ulcer discomfort with upper GI hemorrhage. After the first gastrectomy, the patient continued to complain of recurrent upper abdominal distress, and a marginal ulcer was found by gastroscopy. A second gastrectomy left only 10% of the original gastric capacity, necessitating anticolonic Roux-en-Y gastrojejunostomy.

One year after the second gastrectomy, the patient had hematemesis. An upper GI series showed: (1) A minute gastric pouch, (2) gastric outlet obstruction, and (3) intussusception of small bowel into gastric pouch (Figs 4 and 5). The fluoroscopist reported "intermittent intussusception of small bowel at gastrojejunostomy with the intussusception never completely reduced."

Laparotomy with gastrotomy confirmed the retrograde but viable JGI of efferent jejunum; ie, the defunctionalized limb of Roux-en-Y. The redundant

intussusceptum was resected, and the gastrojejunostomy was reconstructed using a retrocolic Roux-en-Y anastomosis, fixing the defunctionalized jejunum at the aperture in the transverse mesocolon. The patient remains well, except for reflux esophagitis, two years after surgical correction of the JGI.

Discussion

The first patient had the classic manifestations of an acute JGI superimposed on the chronic syndrome. She had previously complained of recurrent postprandial discomfort, emesis, and weight loss from her original gastrectomy. It is important to note that interval investigation by an upper GI series was nondiagnostic until the onset of the acute phase. One must not be complacent with the postgastrectomy patient who has vague postprandial symptoms and negative GI studies because the patient may return with potentially lethal complication of acute JGI at any time, three days to 35 years postgastrectomy.²



Fig 1. (Case 1) Upper GI series in acute jejuno gastric intussusception—retrograde—of efferent loop. Shows classical X-ray findings of: (a) Lobulated intragastric mass, (b) gastric outlet obstruction with dilatation of efferent loop, and (c) esophageal reflux.



Fig 2. (Case 1) "Coiled Spring" intussusceptum—incarcerated jejunum.



Fig 3. (Case 1) Gangrenous intussusceptum—jejunum covered with barium.

The second case is unique in that when a second gastrectomy left only 10% of the stomach, it was found necessary to employ a Roux-en-Y gastrojejunostomy. Sequential anrectomy, truncal vagotomy, and Roux-en-Y gastrojejunostomy can give significant retention and delayed transit in the Roux-en-Y limb. This phenomenon has been demonstrated using 99-M Technetium labelled foods followed with gamma camera.³

JGI is retrograde and of the efferent loop in 75% of all reported cases. It is a rare phenomenon, with fewer than 300 cases reported in the world literature since the first case report in 1914. This potentially lethal complication continues to exact a 50% mortality if not diagnosed and treated correctly within 48 hours after onset of the acute phase.⁴

JGI probably results from motility disturbance and is little influenced by either the configuration or size of the gastrojejunostomy or the presence or type of vagotomy. Proponents of a specific gastrojejunostomy often suggest that their favorite gastrojejunal anastomosis is less prone to develop either dumping syndrome or jejunogastric intussusception. The actual incidence of JGI reported is the same for both Polya and Hofmeister anastomoses. Though retrograde intussusception of Roux-en-Y limb seems unlikely considering its isoperistaltic physiology, that it occurs is demonstrated in Case Two, and approximately ten others of the 300 reported cases.⁵

JGI should be considered as a diagnosis in

postgastrectomy patients with recurrent or persistent emesis, particularly if it results in epigastric pain with hematemesis. Eighty percent of acute JGI patients have hematemesis as the chief complaint.⁶ Most patients probably have multiple self-reducing bouts of JGI prior to the inexorably progressive intussusception, as in Case One. If an upper GI series or gastroscopy is not performed at a fortuitous time, the chronic phase of JGI will go undiagnosed or be labeled a more common postgastrectomy syndrome.⁷

Diagnosis

High index of suspicion remains the most important diagnostic instrument for diagnosing this rare entity.⁸ Appropriate diagnostic investigation must include an upper GI series. Although gastroscopy may confirm this diagnosis (JGI), evaluate viability of intussusceptum, and has been used to reduce JGI in a few cases, diagnosis of JGI by gastroscopy may be difficult, and successful reduction is not always possible.

Waiting for the acute JGI triad of prior stomach surgery, palpable epigastric mass, and



Fig 4. (Case 2) Jejunogastric intussusception—acute and chronic phase of Roux-en-Y gastrojejunostomy.



Fig 5. (Case 2) Roux-en-Y—gastrojejunostomy obstructed by retrograde intussusception of defunctionalized limb.

hematemesis should be relegated to the same obsolete practice as waiting for a morasmic infant with visible gastric wave and easily palpated olive in hypertrophic pyloric stenosis. In 72 years, at the Mayo Clinic, only sixteen cases of JGI have been recognized—none of these were diagnosed nor even clinically considered prior to an upper GI series.⁹ Each of the eleven cases operated had a different surgeon.

Treatment

Successful reduction of the chronic type of JGI per gastroscope has been reported, but I urge laparotomy to confirm diagnosis and to ascertain completeness of reduction and viability of intussusceptum, particularly if there has been hematemesis. The exact operation should be

tailored by the surgical findings. Rather than terminating the procedure after disinvagination of JGI, most surgeons would advocate re-resection of a large gastric pouch, revision of the gastrojejunal stoma and fixation of the efferent jejunal limb.

For the high-risk patient with strangulated intussusception, the minimal adequate procedure will suffice, as the incidence of recurrence of one-time surgically reduced JGI is nil. An ideal, but not always technically feasible procedure would be conversion of a Billroth II gastrojejunostomy to a Billroth I pattern.¹⁰

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The physician's continuing education, whether he is a scientist practicing in a medical school or a general practitioner practicing in some rural area, is largely a process within himself, one he pursues on his own. He may have some help from his professional colleagues in the county medical society or in a research group, but most of his true learning — the part that sticks with him — is what he does for himself, by himself.

— George T. Harrell
Journal of Medical Education
33 (October, Pt II):217, 1958

Nutrition for the Practitioner IV

Current Concepts in Nutrition: Vitamin E

STEPHEN R. NEWMARK, MD

Several states of vitamin E deficiency in humans have recently been described, including certain deficiency syndromes in premature infants and in patients with β -lipoprotein deficiency. Vitamin E can also be useful in the treatment of some diseases, such as peripheral vascular disease and hemolytic anemia in the newborn, but to date there are no controlled studies showing it to be of benefit in treating ischemic heart disease or congestive heart failure.

Vitamin E refers to the group of substances classified as tocopherols, of which dl α tocopherol acetate is the "natural" form and dl γ tocopherol the form most available for clinical use.¹

Source

Vitamin E is derived from vegetable and seed oils such as safflower oil and sunflower oil. Diets containing 2,000 to 3,000 calories usually contain 8 to 11 mg of α tocopherol or 12 to 16 IU of vitamin E.^{2,3}

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Absorption and Metabolism

The tocopherols are fat soluble and must be absorbed in conjunction with the gastrointestinal absorption of fat.¹ Once absorbed, tocopherols circulate in conjunction with low-density lipoproteins. The level of total circulating lipids is directly correlated to the level of circulating tocopherols.

The tocopherols are stored in various organs such as the liver, adipose tissue, and muscle.

Daily Requirements

Previous recommendations have listed a requirement for vitamin E to depend on the level of polyunsaturated fatty acids (PUFA) in the diet.¹ The vitamin E:PUFA was suggested to be > 0.6 . However, PUFA from natural sources contain vitamin E; thus, extra supplementation with vitamin E in diets containing large amounts of PUFA appears to be unnecessary.⁴

The current recommended dietary equivalent for vitamin E is 8 mg of dl-tocopherol (12 IU) for females and 10 mg (15 IU) for males.⁵

Function

Vitamin E appears to function biologically as an antioxidant. It has been hypothesized that tocopherol can react with free radicals that may

alter PUFA in biological membranes producing membrane damage.⁶ Nearly all explanations of vitamin E activity in human disease have depended on this concept.

Deficiency States

Deficiency states of vitamin E have only recently been described in humans. Plasma levels range from 0.5 to 1.6 mg% in adults and from 0.2 to 1.3 mg% in infants. One of the first descriptions of clinical vitamin E deficiency concerned the prematurely born child who may present with bronchopulmonary dysplasia, hemolytic anemia, edema, and a nonspecific skin lesion.^{7,8}

An additional syndrome previously described in animals has been reported in patients with β -lipoprotein deficiency in which circulating tocopherol levels are decreased. These patients present with degeneration of anterior horn cells, degeneration of vestibular nuclei, and dysfunction of the pyramidal tracts.⁴

Malabsorption disorders such as gastrointestinal mucosal disease or pancreatic insufficiency or disorders of the hepatobiliary system have been associated with vitamin E deficiency. The syndrome of areflexia, disturbance of gait and proprioception, diminished vibratory sensation, and ophthalmoplegia is similar to symptoms observed in abetalipoproteinemia, which in turn have been ascribed to vitamin E deficiency.⁴ Similar cases have been reported in patients with malabsorption secondary to cystic fibrosis and chronic liver disease.⁹

It has been suggested that vitamin E acts as an active antioxidant and may particularly protect the red cell membrane from endogenous free radical damage. Vitamin E deficiency has been reported to be associated with increased fragility of the red cell membrane.⁴

Treatment of Vitamin E Deficiency States

Oral vitamin E at levels of 25 to 500 IU/day has reportedly reversed symptoms of vitamin E deficiency.⁴ Intravenous preparations of vitamin E in MVI and MVI-12 can provide 5 IU per ampule. It should be noted that vitamin E has been reported to inhibit vitamin K activity; thus, caution should be exercised in patients receiving anticoagulants.¹⁰

1. Cardiovascular Disease. Vitamin E has been proposed as a panacea for various types of cardiovascular disease including angina pectoris, congestive heart failure, and peripheral vascular disease. To date there are no controlled studies that show a significant benefit from the use of vitamin E in ischemic heart disease or congestive heart failure.^{11,12}

Although increases in high-density cholesterol (HDL) have been demonstrated in women receiving vitamin E, HDL levels did not increase significantly in males.⁴ The use of vitamin E in favorably altering high-density cholesterol levels remains speculative, however.

2. Peripheral Vascular Disease. Peripheral vascular disease is a clinical disease in which vitamin E has been shown to have therapeutic efficacy. Pain or intermittent claudication was lessened with the administration of vitamin E, although a double-blind trial was not conducted. The therapeutic efficacy, dose, possible side effects, indications, and contraindications to the use of vitamin E in peripheral vascular disease are still to be determined.¹³

3. Prematurity. Bronchopulmonary dysplasia developing in the premature newborn infant has been successfully treated with large doses of vitamin E. The incidence of retrolental fibroplasia has also been reduced by supplementation with vitamin E.⁴ It is felt that vitamin E stabilizes biological membranes against possible oxidants.

4. Hemolysis. Vitamin E has been used to treat hemolytic anemia in the newborn, particularly if the infant is supplemented with an excess of linoleic acid.⁴ It must be emphasized, however, that many factors may contribute to hemolysis, and it has not been conclusively demonstrated that vitamin E deficiency in the newborn is a primary cause of hemolysis.

5. Aging. It has been proposed that aging may in part be the result of biological injury from endogenous free radicals and that vitamin E may provide protection from this process. There are no current data to support this contention.⁴

6. Gonadal Function. Because the syndrome of vitamin E deficiency in the chicken includes degenerative change in the seminiferous tubules of the testes, many individuals have administered or taken vitamin E to improve reproductive capacity, improve libido, or increase sex hormone levels.¹⁴

However, there are no available clinical studies that have demonstrated a beneficial effect in the above reproductive or gonadal problems.

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The Prevention of Tuberculosis

Editor's note: Tuberculosis was a health problem of major concern in Oklahoma in 1909. Throughout the fall and the winter of 1909-1910, the JOURNAL carried numerous articles about the disease. In January 1910, the Oklahoma State Anti-Tubercular Association was organized and held its first state convention in Oklahoma City January 10 and 11. The following editorial, which appeared in the December 1909 issue of the JOURNAL, reflects the tenor of the times.

Never in medical history has there been such a concerted and unanimous movement toward the control and prevention of tuberculosis. Aside from the meetings being held and that are to be held in almost every county and city in the United States and by the County Medical Societies during the close of this and the beginning year, many prominent civic bodies are giving the matter their serious consideration.

When one reflects that this is by far the most potent enemy of mankind, doing by far more damage than all armies and navies combined and that all other diseases pale into insignificance when the destructive force of

tuberculosis is considered, we then realize it is time something were being done for its prevention. That the final result of clean living and civic cleanliness along broad lines will result in the eradication of tuberculosis no serious thinker doubts for a moment, but to do this calls for almost a revolution of present methods and systems of living. It calls for the overthrow of many prejudices existing in the lay mind and for the highest order of mutual assistance between the lay and professional mind. The people must necessarily be educated and shown the reason for regulations affecting sanitary conditions in order that they may carry them out more effectually and no one is in better position to do this, in fact no one, but the family medical advisor is fitted to point out the proper methods for combating disease.

It should be made the function of every physician to pass no opportunity to advise the families under their care as to the means for the prevention of disease, every thing bearing upon their hygienic condition should be considered and co-operation encouraged for their improvement. □



News from the Oklahoma State Department of Health

Laboratory Service

Over a half-million microbiological and chemical analyses are performed each year by the Laboratory Service of the Oklahoma State Department of Health.

Analyses on a variety of human specimens produce information used by various health department program areas, as well as the medical community, to identify and control public health problems. Most testing is performed in support of communicable disease control and other personal health program areas.

The Laboratory Service operates an improvement program for other public and private laboratories in the state, which includes certification and proficiency testing, training, consultative and inspectional service as required by statute or interstate agreements, as well as a limited voluntary laboratory consultation and training program.

In view of the rapid changes occurring in the delivery of personal health services in the United States, some fundamental changes are

indicated for the Laboratory Service. Up to the present time, public health laboratories have operated, for the most part, as service facilities, accepting and inviting a wide variety of specimens, which, to protect the public health, were examined and results duly reported. Conscientiously over the years the list of services has grown, often stretching available resources. Economic and social pressures now demand that the public health laboratory evolve in new directions: reference work, quality control, extension training, and surveillance.

This will require a new perspective on the role of the laboratory in the community. It will also require flexibility in setting new priorities and reordering existing priorities by eliminating outdated technology, phasing out entire services which no longer make sufficient contributions, and reinvesting these resources into more cost efficient areas.

Heavy past activities, such as Group A Beta Streptococcal diagnostic testing, will be turned over to the private sector as the Laboratory Service of the Oklahoma State Department of Health attempts to break new ground.

DISEASE	May 1984	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	6	4	7
CAMPYLOBACTER INFECTIONS	11	56	53	—
ENCEPHALITIS, INFECTIOUS	1	6	9	10
GIARDIA INFECTIONS	13	68	61	—
GONORRHEA (Use ODH Form 228)	1131	5129	6374	5900
HAEMOPHILUS INFLUENZAE INVASIVE DISEASE	19	90	65	—
HEPATITIS A	27	167	187	160
HEPATITIS B	21	130	113	84
HEPATITIS, NON-A-NON-B	6	17	19	—
HEPATITIS UNSPECIFIED	6	43	86	78
MEASLES (RUBEOLA)	1	6	1	122
MENINGITIS, ASEPTIC	2	16	49	28
MENINGITIS, BACTERIAL (non-meningococcal, non H. Influenzae)	6	20	39	25
MENINGOCOCCAL INFECTIONS	6	21	19	17
PERTUSSIS	78	192	34	14
RABIES (Animal)	9	53	60	93
ROCKY MOUNTAIN SPOTTED FEVER	19	20	31	24
RUBELLA	0	0	0	2
SALMONELLA INFECTIONS	29	119	161	100
SHIGELLA INFECTIONS	18	54	73	81
SYPHILIS (Use ODH Form 228)	11	78	113	71
TETANUS	0	0	0	0
TUBERCULOSIS	27	94	125	127
TULAREMIA	0	1	6	4
TYPHOID FEVER	0	1	1	0

Diseases of Low Frequency	Total to Date This Year
ACQUIRED IMMUNE DEFICIENCY SYNDROME	2
BRUCELLOSIS	2
LEGIONNAIRES DISEASE	9
MALARIA	3
REYE SYNDROME	12
TOXIC SHOCK SYNDROME	6
RABIES	
BECKHAM	SKUNK 1
CADDO	CAT 1
GARVIN	COW 1
GRADY	SKUNK 2
KIOWA	COW 1
OKFUSKEE	SKUNK 1
WAGONER	SKUNK 2

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Members named to Hospital Medical Staffs Council

The Oklahoma State Medical Association Council on Hospital Medical Staffs, approved by the OSMA House of Delegates in May, has been organized, and council appointments have been announced. The new council will act as liaison between the OSMA and hospital medical staffs across the state.

Orange M. Welborn, MD, Ada, will serve as chairman for 1984-85. His vice-chairman, representing Baptist Medical Center in Oklahoma City, is William O. Coleman, MD.

Other council members from Oklahoma City are Kenneth Whittington, MD, Deaconess Hospital; Jay P. Cannon, MD, Oklahoma Memorial Hospital; William F. Barnes, MD, Presbyterian Hospital; Mark R. Johnson, MD, Rehabilitation Institute of Oklahoma; Gary W. Rahe, MD, St Anthony Hospital; Nick Knutson, MD, South Community Hospital; and Charles E. Smith, MD, Veterans Administration Hospital.

Members appointed from Tulsa are Harlan Thomas, MD, Doctors Medical Center; Homer D. Hardy, Jr, MD, Hillcrest Medical Center; Gerald E. Gustafson, MD, St Francis Hospital; and Boyd Whitlock, MD, St John Medical Center.

Representing Enid hospitals are Terry M. Lewis, MD, Bass Memorial Baptist Hospital and Jerome M. Dilling, Jr, MD, St Mary's Hospital.

Other hospitals in Oklahoma are represented by J. K. Falsarella, MD, Valley View Hospital, Ada; A. Craig Robertson, MD, Anadarko Municipal Hospital, Anadarko; Robert J. Weedn, MD, Duncan Regional Hospital, Duncan; Robert L. Anderson, MD, Cushing Regional Hospital, Cushing; John R. Perkins, MD, Community Hospital, Elk City; Julius A. Lacroix, Jr, MD, Choctaw Memorial Hospital, Hugo; and William B. Dawson, Jr, MD, Muskogee General Hospital, Muskogee.

From other hospitals are Robert C. Bowman, MD, Nowata Hospital, Nowata; Michael R. Talley, MD, Okeene Municipal Hospital, Okeene; Michael E. Sandlin, MD, Okmulgee Memorial Hospital, Okmulgee; and John L. Smith, MD, St Joseph Medical Center, Ponca City.

Additional appointees are Harold S. Krueger, MD, Willow View Hospital, Spencer; Leo Meece, MD, Woodward Memorial Hospital, Woodward; and David VanHooser, MD, member-at-large, Edmond.

□

ACSH rates magazines on nutrition advice to public

Readers who are looking for accurate nutrition information in magazines can obtain some guidance from a new survey by the American Council on Science and Health (ACSH), published in the *ACSH News & Views*.

"In our survey of 30 popular magazines, we found nine which publish information about nutrition often and have high accuracy ratings. If you're looking for magazines that will regularly give you good nutrition advice, these are your best bets," says ACSH Research Associate Dr Densie Hatfield.

The nine magazines are *Good Housekeeping*, *Self*, *Health*, *Essence*, *Glamour*, *Vogue*, *American Health*, *Mademoiselle*, and *Consumers' Research*.

Eleven other magazines, which publish articles on nutrition less frequently, also earned high ratings in the ACSH survey. They are *Better Homes and Gardens*, *Changing Times*, *50 Plus*, *Parents*, *Reader's Digest*, *Redbook*, *Science '82-'83*, *Scientific American*, *Seventeen*, *Consumer Reports*, and *Consumers' Digest*.

"Unfortunately, not all of the news from

our survey is good," reports ACSH Executive Director Dr Elizabeth M. Whelan. "We found five magazines that publish substantial numbers of articles about nutrition, with less than half of them scientifically accurate. Two of these, *Let's Live* and *Prevention*, specifically identify themselves as health-oriented. We think that publications of this type carry a heavy responsibility to the readers who depend on them for correct health information. So we were particularly disappointed with these magazines."

The five magazines that received low accuracy ratings in the ACSH survey were *Harper's Bazaar*, *Let's Live*, *Prevention*, *Saturday Evening Post*, and *Cosmopolitan*.

Dr Hatfield adds, "We still caution readers, as we did two years ago, that it's important to be aware that not everything you read in print is correct. Be selective about what nutrition advice you accept. If a diet plan and its promised results sound too good to be true, chances are that is exactly the case."

□

Report links acne drug to fatal birth defects

A warning that a drug used for severe acne can cause birth defects in infants appears in a recent *Journal of the American Medical Association (JAMA)*.

A researcher from the University of Miami School of Medicine reports on two infants born with a series of anomalies, including hydrocephalus, malformed ears, small mouth, and cleft palate. Both mothers had taken isotretinoin (Accutane) in the first trimester of pregnancy, says Paul J. Benke, MD, PhD. Neither child survived.

"Accumulating experience suggests that isotretinoin is one of the most severe teratogens seen to date," Benke says. "Large amounts of isotretinoin ingestion by the mother are not required for the appearance of dramatic and devastating features in the newborn."

Isotretinoin is a retinoic (vitamin A) acid that inhibits the production of sebaceous gland lipid, and it is very effective in severe nodular and cystic acne of the type that causes marked scarring. Among other actions, the drug reduces the size of the sebaceous gland. It has been mar-

keted in the United States since September 1982.

"Most likely, isotretinoin will be reserved for patients with severe cystic acne who are unresponsive to conventional therapy, including systemic antibiotics, because of its potential for severe side effects," according to the current edition of the *AMA Drug Evaluations*.

Researcher Benke observes that the teratogenicity of isotretinoin was well known as a result of animal studies and that some reports of spontaneous abortions and birth anomalies have been reported. As a result, the drug has been listed as a severe hazard during pregnancy by the Food and Drug Administration.

"The effects of isotretinoin teratogenicity have not been presented in detail," he says. "This report describes two infants with central nervous system, ear, and facial malformations, born after maternal ingestion of isotretinoin during early pregnancy. These features were distinct and constitute a recognizable syndrome in infants so exposed."

□



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Oral charcoal valuable in drug overdose treatment

According to two reports in the *Journal of the American Medical Association (JAMA)*, oral activated charcoal is an effective treatment for drug overdose.

The first report, by Peter Gal, PharmD, and colleagues at the University of North Carolina at Chapel Hill, describes the use of oral activated charcoal to treat a 23-year-old woman who had ingested 20 tablets each of terbutaline sulfate and theophylline (Theo-Dur). The serum theophylline half-life fell significantly after administration of oral activated charcoal, 50 g, every six hours.

The researchers conclude, "While hemoperfusion using charcoal or resin appears to be the most efficient method for removing theophylline, oral activated charcoal is less expensive, more widely accessible, and probably safer." They add that not only has it been reported to absorb drugs, but it also appears to promote drug elimination, thereby shortening the duration of toxic symptoms.

The second report describes a study by Susan M. Pond, MBBS, and colleagues, of the University of California, San Francisco, on the effectiveness of repeated oral doses of activated charcoal in treating phenobarbital overdose. They found that while the charcoal therapy significantly increased elimination of phenobarbital, it had no clear effect on the patients' clinical course.

All ten patients in this study were comatose and all received an initial dose of activated charcoal and cathartic. Five were given re-

peated doses of 17 g of activated charcoal in 70 mL of 70% sorbitol every four hours. All patients in both groups received supportive care in the intensive care unit, including mechanical ventilation and administration of fluids.

The length of time that patients in the two groups required mechanical ventilation did not differ significantly, and the single-dose group met criteria for extubation with higher serum phenobarbital concentrations than the repeated-dose group, the researchers say. Based on the results of this small randomized trial, it appears that repeated doses of oral activated charcoal might significantly reduce phenobarbital half-life but do not significantly hasten the patient's recovery from an overdose of phenobarbital. □

Mayonnaise not the culprit in picnic food poisoning

Many people are uneasy about eating chicken salad, potato salad, and similar dishes at summer picnics because they have heard that foods made with mayonnaise are the most likely to cause food poisoning.

However, according to the American Council on Science and Health (ACSH), scientists have shown that adding mayonnaise to a food does *not* make it more dangerous. Foods containing mayonnaise may actually be slightly *safer* than similar foods without mayonnaise



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because the acid in the mayonnaise slows the growth of the bacteria that cause food poisoning. Mixed foods, like chicken salad, probably got their bad reputation simply because they undergo a lot of handling during preparation, and this can contaminate them with bacteria.

To prevent bacterial food poisoning, the basic rule is to keep hot foods hot and cold foods cold. Perishable foods (with or without mayonnaise) may not be safe to eat if they have been held at temperatures of 60° F or higher for more than three or four hours.

If you're carrying hamburger or other raw meat for a cookout, it should be put in a cooler, but kept separate from other foods. Uncooked meats contain relatively large numbers of bacteria, some of which could be harmful. The common food poisoning types are sensitive to heat, so cooking will kill them, making the meat safe to eat. These bacteria can cause problems, however, if they contaminate other foods, such as salads, that don't receive further cooking before they are eaten. □

Drug combination prevents postsurgical thrombosis

Researchers participating in a multicenter trial have determined that one drug combination is especially effective in preventing deep vein thrombosis (DVT) in patients undergoing elective surgery. Their findings are reported in the *Journal of the American Medical Association (JAMA)*.

According to the principal investigator, Arthur A. Sasahara, MD, of the Veterans Administration Medical Centers in West Roxbury and Brockton, Mass, and colleagues from 15 other centers, the risk of DVT of the lower extremities is relatively high for patients aged 40 years or older who undergo major surgery. The death rate for this group from postsurgical pulmonary embolism is nearly 0.1%; it is about 0.2% for all patients undergoing surgery. Pulmonary embolism from DVTs accounts for 150,000 deaths each year in the United States, the researchers say.

To test the effectiveness of various drug doses in preventing DVT, the study included 880 patients, all aged 40 years and older, who were randomized into five treatment groups including four receiving varying amounts of dihydroergotamine mesylate and/or heparin sodium and one group receiving placebo. Treatment was started two hours before surgery and continued twice daily for five to seven days. Rates of DVT ranged from 9.4% to 24.4% with the placebo. The drug combination of dihydroergotamine mesylate, 0.5 mg, plus heparin sodium, 5,000 IU, was shown to be significantly superior to other treatments.

The researchers note that although the ad-

ministration of heparin sodium has been shown to be effective in preventing DVT, the fear of causing increased bleeding has discouraged its widespread use. More recent clinical trials have shown that heparin in combination with dihydroergotamine mesylate (which tends to constrict certain blood vessels) is more effective than the same dose of heparin alone.

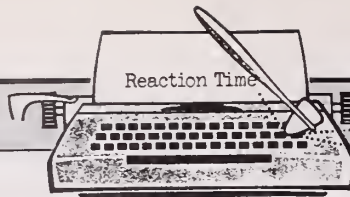
In this multicenter trial, adverse drug experiences did not differ significantly between groups, and the researchers report a low incidence of bleeding or hematoma.

There was one death that may have been drug related, they say, which demonstrates the need for terminating administration of dihydroergotamine in any patient who experiences sepsis, low blood pressure, or heart attack.

In a related editorial, Jack Hirsh, MD, of McMaster University in Hamilton, Ontario, says that primary prophylaxis, as used in this study, is more effective and less expensive than early detection and treatment of subclinical venous thrombosis.

He adds, "This large well-conducted study provides the clinician with useful information. It demonstrates once again that low-dose heparin does not produce clinically significant bleeding when this complication is assessed using a double-blind trial design."

Hirsh says heparin is contraindicated in some types of surgery and that new forms of the drug, as well as other therapies, are being tested to determine the safest prophylaxis for DVT. □



Sparks fly over smoking article . . .

Re: "A One-Year Follow-up Study of the Damon Group Hypnosis Smoking Cessation Program"

The above article appeared in your December, 1983 edition of the JOURNAL. On behalf of the Damon and Grace Corporation, I would like to request that you publish the following rebuttal to this article.

The stated purpose of the study was to show that the success rates of various smoking cessation programs have been inaccurately reported. To quote from the article: "The following significant data are not uniformly presented:

- The percentage of subjects not completing the program and measures of their behavior;

- The percentage of subjects not reached for follow-up data. Often if reported, they were excluded when determination of success rates is made;

- The length of time of follow-up (varies from three months to one year)."

In spite of what was stated above as to the purpose of the article, in fact, the points cited above were not treated reasonably or were completely ignored.

The first point, "not completing the program," is totally ignored in the computation of percentages. How many of the "successes" attended more than one session or used the cassette tape as a method of reinforcement? How many of the reported failures participated or attended more than one session conducted by Damon or used the cassette tape method of reinforcement? It is the practice of Damon to emphatically state to all participants in a group hypnosis session that repetition of the procedure is very helpful. Nowhere in the article is this reflected.

The second point (actually the basis of the entire study) is treated in such a fashion that

But authors stand behind their findings

Re: Letter from D. D. Dudley in response to "A One-Year Follow-Up Study of the Damon Group Hypnosis Smoking Cessation Program." Published in Volume 76, No. 12, December, 1983.

In an attempt to answer any questions resulting from Mr Dudley's letter, we would appreciate it if you would publish the following:

The purpose of our article, as found in the abstract and repeated later in the article, was to report the results of a large group smoking cessation program following standard guidelines. We were evaluating participants who completed a *single* group hypnosis effect.

A total of 783 people completed the minimal requirement of the hypnosis program: paying a \$25.00 fee, attending and completing the one session. As mentioned in our article, cassette tapes were available at an additional cost and could have been used by the participants for post-treatment reinforcement (p 415, second

column). No measurement of participants' use of this service was made. Owens and Samaras (1981) found that only 14 quitters out of 129 (11%) used the cassette tape as a booster in their evaluation of a similar program. Participants also could have attended more than one session for additional reinforcement. We found that those attending more than one session were significantly less likely to be abstinent at the one year follow-up period.

Let's turn to Mr Dudley's methodological concern about including nonrespondents as program failures. In *Smoking and Health: A Report of the Surgeon General* (USDHEW, 1979), much discussion is given to the comprehensiveness of follow-up. Based upon the review of over 100 smoking cessation programs (Bernstein, 1969; Schwartz, 1969), the Surgeon General states: "Follow-up results based only on participants who respond or who are readily available are especially suspect" (USDHEW,

it offends any modicum of common sense. To quote from this article, "It is imperative that valid quit rates include non-respondents as failures." Why is this necessary? Writers of the article cite two authorities for their position. However, upon close examination of their references, it is determined that one of their references is in fact the author of the very article in question. It seems that any interpretation of the data would require that non-respondents be merely reported as such without including them in either the failure or success category. There could be several different reasons for their not responding to the questionnaires and telephone follow-up. It is very prejudicial to Damon and Grace and poor methodology to include non-respondents in either the success or failure categories.

Further, the authors of this study do not indicate what questions were asked, whether answered by questionnaire or telephone, nor how they were asked. It is well known that the method in which a question is asked can often solicit the desired response. The category of occasional smoker is not clearly defined. The data presented in Table 2 of the article lists four categories of responses. Only one category is a regular smoker. The other categories are as follows:

1. Ex-smoker Since Treatment;
2. Smoked Regularly but now Ex-smoker;
3. Smoked Occasionally Since Treatment.

The total number of responses in these three categories was 157. If one were to define success as reduction in smoking although not complete cessation, then the success percentage reported in the article would be significantly higher. This added to the total number of responses would show a success rate of approximately 26 percent. Further, there is no explanation as to what amounts to a regular smoker. Is this defined as a person who smokes three cigarettes per day or three packs per day? The fact that the person is a regular smoker and went back to smoking could have been for numerous and/or different reasons. There is no indication in the article as to whether the people who did the questioning in the program or the questionnaire explored the possibility that a person who returned to smoking did so because of a personal reason or because of shortcomings in the hypnosis program. In order to gauge the effectiveness of any program, these questions need to be asked.

Damon and Grace believe that the attitude of the report and purpose of the report is to show that other studies are inaccurate. The ar-

(continued)

1979, p 19-8). Very basic epidemiologic methodology asserts that nonrespondents be counted as program failures (McMahon and Pugh, 1970, p 218-219; Friedman et al, 1983, p 162-163).

It was quite apparent from our report that individuals who responded to the last attempt to collect data were more likely to be smokers from those who responded to early attempts to collect the data (χ^2 df (1) = 24.09, $p < .001$). Our report demonstrated what other researchers have found regarding the reluctance of smokers to return survey materials (Berglund, 1969; Noll, 1969; Oakes, Friedman, and Seltzer, 1973; Seltzer, Bosse, and Garvey, 1975; Evans and Lane, 1980; Wagner, Note 1).

In 1974 the National Interagency Council on Smoking and Health published guidelines for evaluating the effectiveness of smoking cessation programs. Those guidelines state: "Persons who cannot be reached for follow-up should

be counted as failures (smokers) rather than assuming that those who respond are representative of the total study population" (NICS, 1974, p 16). As a consequence of that report the National Center for Health Education in collaborating with six other major organizations involved with smoking cessation developed a Code of Practice and Standards to evaluate quit smoking programs (ALA, Note 2). The organizations involved include the American Cancer Society, American Health Foundation, American Heart Association, American Lung Association, Five-Day Plan to Stop Smoking, and SmokEnders. Their guidelines state: "It is essential to reach as many in-term quitters as possible. *Those not reached must be counted as smokers*, an assumption amply warranted by the experience of numerous studies" (Note 2, p 4).

Our article clearly stated that 346 partici-

(continued)

ticle even cites these studies by name, and yet the headline loudly proclaims "The Damon Group Hypnosis Smoking Cessation Program" which is highly prejudicial to Damon and Grace. Damon and Grace would like to point out the study was conducted without either their consent or input. No attempt was made on the part of the authors to understand the principles involved in the Damon and Grace Program and the inquiries made by questionnaire and telephone may have been very misleading. If the issue in this matter is really the bias of success rates, where is the study on other cessation methods, including the authors? This study only serves to cloud the issue of statistics used in arriving at success and failure rates in smoking cessation programs even more than it is at present. Also, it is prejudicial to the Damon and Grace Smoking Cessation Program.

Yours very truly,
D. Dennis Dudley, PC
Lansing, Michigan

Authors (continued)

pants responded by mail and that an additional 246 participants responded to the phone survey.

In our study there were five questionnaire items that dealt directly with the amount of cigarettes smoked daily, length of time smoked since treatment, and participants' classification of their smoking behavior. These five items were used to decrease internal validity threats. A regular smoker is defined as a person who smokes at least one cigarette/day or seven cigarettes/week. An ex-smoker is defined as a person who formerly smoked cigarettes regularly but who has not smoked since treatment. An occasional smoker is defined as a person who smokes occasionally (less than one cigarette/day or seven cigarettes/week). These definitions are consistent with the recommended guidelines from the National Inter-agency Council on Smoking and Health (1974).

Phone volunteers were trained to gather data from nonrespondents. In an attempt to minimize the amount of time involved, participants reached via the phone were asked to describe their smoking behavior as one of the following:

- 1 — smokes regularly since the hypnosis session
- 2 — smoked regularly for some period, but I do not smoke now
- 3 — I have smoked occasionally since the hypnosis session
- 4 — I have not smoked at all since the hypnosis session

The use of any other measure of success, aside from complete abstinence for one year, is highly suspect. The Surgeon General (USDHEW, 1979) relates that the primary evaluation of treatment be based on the results of complete abstinence from the cigarette habit. This is recommended in view of the following facts:

First, the goal of most cigarette smokers seeking help to quit is abstinence (Bernstein, 1969, 1970; Bradshaw, 1973; Hunt and Bepalec, 1974; Lichtenstein and Danaher, 1976).

Second, most smokers who fail to remain abstinent eventually return to baseline smoking rates (Bernstein, 1969; Bernstein and McAlister, 1976; Hunt and Bepalec, 1974; Lynch, 1963, Mcfall and Hammen, 1971; Hammond and Garfinkel, Note 3).

Third, the analysis of data on number of cigarettes smoked can yield statistically significant results with little abstinence in the treatment group (Mcfall and Hammen, 1971; Schwartz, 1969; Schwartz and Rider, 1977).

Fourth, reporting abstinence is less reactive to self-monitoring reporting than reporting actual amount smoked, in the absence of objective measurements (Lichtenstein and Danaher, 1976).

Additional analysis of psychosocial mediators was beyond the scope of the December 1983 article. Such analysis has since been completed, based upon matched pre- and post-treatment questionnaires, and has been submitted for publication.

The paper published in December 1983 attempted to evaluate the success of a large group hypnosis quit smoking program. Success was defined as abstinence from cigarette smoking since treatment. A total of 783 smokers completed the program. One year after treatment 78% of the participants were successfully contacted. All nonrespondents were counted as failures (smokers). Our results indicated that 14% (113) of the participants remained ex-smokers for one full year.

We sincerely thank you for the opportunity to respond to Mr Dudley's correspondence.

Sincerely,
Timothy J. Wagner, RN, MS
Michele Hindi-Alexander, PhD
Michael B. Horwitz, PhD

Reference Notes

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In Memoriam

1983

Aaron C. Little, MD	July 1
Michael C. Manning, MD	July 3
Hillard E. Denyer, MD	August 8
Edward A. Allgood, MD	August 18
Hugh E. Wilson III, MD	August 27
Harold J. Black, MD	September 1
Marque O. Nelson, MD	December 24
Park H. Medearis, MD	December 26
Charles S. Beaty, MD	December 28

1984

Jack H. Foertsch, MD	January 19
Thomas L. Ozment, MD	February 11
Thomas L. Foster, MD	February 25
Robert W. Lowrey, MD	February 27
Ella Mary George, MD	March 1
Kemper C. Lain, MD	March 8
William R. Cheatwood, MD	March 12
William A. Dean	March 19
Charles H. Cooke, MD	March 23
Donald J. Worden, MD	April 1
William I. Jones, MD	April 3
Paul Kernek, MD	May 9
Leon C. Freed, MD	June 12
William D. Bolene, MD	June 18
Lee K. Emenhiser, MD	June 26

Deaths

LEON COLEMAN FREED, MD 1913 - 1984

Leon C. Feed, MD, died at his home in Perkins on June 12. A specialist in internal medicine in Stillwater, Dr Freed began his practice in Perkins after his graduation from the Cincinnati School of Medicine in 1938. In World War II, he served as a major in the 134th Medical Group and later as Chief of Medicine of the 45th Field Hospital. In addition to his private practice, Dr Freed served for over 30 years as a clinical professor of medicine at the University of Oklahoma College of Medicine.

WILLIAM D. BOLENE, MD 1931 - 1983

Stillwater radiologist William D. Bolene, MD, a 1958 graduate of the University of Oklahoma College of Medicine, died June 18. A native of Enid, he served three years in the US Air Force before beginning his professional training in Oklahoma City. After completing his in-

Deaths (continued)

ternship and residency there, he established his practice in Stillwater, where he served last year as chief of staff of Stillwater Medical Center.

LEE K. EMENHISER, MD
1906 - 1984

Lee K. Emenhiser, MD, born in Davidson, Oklahoma Territory, died June 26 in Oklahoma City. He was 77. Dr Emenhiser was graduated

from the University of Oklahoma School of Medicine in 1931 and practiced otorhinolaryngology in Oklahoma City for 39 years. During World War II he was chief of the Eye, Ear, Nose, and Throat Department at Brooke General Hospital, Fort Sam Houston, Texas. He was a founder of the Oklahoma Medical Research Foundation and a clinical professor of otorhinolaryngology at the University of Oklahoma Medical School. Dr Emenhiser was awarded a Life Membership in the OSMA in 1977.

Book Reviews

The Germ of Laziness: Rockefeller Philanthropy and Public Health in the New South. By John Ettling. Cambridge, Mass: Harvard University Press, 1981. Pp 263, \$18.50.

This is the compelling story of the Rockefeller Sanitary Commission, founded in 1909 to fight hookworm diseases in the "New South," which was recovering from the ravages of the Civil War. Hookworm disease was widespread in the South at that time, but few American physicians knew of its existence before Charles W. Stiles, a zoologist, began his crusade against it. Stiles traveled about the South attempting to convince physicians that they were failing to protect their patients against a disease caused by poor personal habits. The mission was doomed to failure.

Stiles is portrayed as a conscientious but basically unpleasant man who sought private funds after the Treasury Department seemed unable to appreciate the importance of hookworm in the poverty of the South. So prevalent but unrecognized was this parasitic infestation that it was subsequently named the "germ of laziness" (after the debilitating anemia it produced). Stiles was fortunate to meet Frederick T. Gates, who administered the John D. Rockefeller charities. A project to eradicate hookworm disease seemed appropriate for the Rockefeller Foundation's support.

The Rockefeller Sanitary Commission proceeded to expose the prevalence of the disease, to educate physicians and the public, and to produce a cure. How the commission went about its work, particularly its use of religious revival techniques to "spread the word," is well

described. After five years and the expenditure of \$800,000, more than 400,000 patients had been screened and treated under the direction of the commission. Although the commission had its ups and downs, it was in the main successful.

Ettling portrays the development of a public health program and demonstrates the value of public education in the achievement of social change. He gives us a vivid image of the evangelical zeal of Gates and Stiles as they pursued their objective. Their dedication and accomplishments stand in sharp contrast to the present, where so many social programs seem to be ineptly conceived and handled.

This book is thoroughly researched and well written. It will be attractive to anyone interested in important public health movements.

Harris D. Riley, Jr, MD
Children's Memorial Hospital
University of Oklahoma Health Sciences Center
Oklahoma City, Oklahoma

Orthopaedic Traction Manual A. F. Brooker, Jr, MD; G. Schmeisser, MD. Baltimore: The Williams and Wilkins Company, 1980. Pp 110. Price not given.

It was refreshing to see a book dedicated to orthopaedic traction techniques, a method that all too often is forgotten. Because of the recent approach toward more aggressive internal fixation of fractures and to the use of external fixators, many of the tried and tested

techniques for traction management or orthopaedic injuries are being forgotten by today's generation of orthopaedic house officers.

The book is well written and the simple line drawings serve their function quite nicely. While almost any orthopaedist could think of a favorite method of traction or variation of traction that was left out of the book, it covers all of the common forms in sufficient detail. The format of listing the indications, components, application, and risks allows the user to read a section in entirety or to refresh only those areas necessary. The material is presented concisely but remarkably completely.

The authors are to be commended for bringing together the various traction techniques and reminding us once again of their place in the armamentarium of the orthopaedist. They have not belabored the various alternatives to traction, mentioning only that there are various types of traction that can be used in different orthopaedic injuries. As suggested by the authors, this book should be of particular use to students, house officers, emergency rooms, and nurses' stations. It also provides a good review source for the practicing orthopaedist. The references provided facilitate more in-depth study by those who find it necessary.

*J. Andy Sullivan, MD
Associate Professor
Chief, Pediatric Orthopaedics
Oklahoma Children's Memorial Hospital
Oklahoma City, Oklahoma*

Guide to Therapeutic Oncology. By Patrick R. Bergevin, MD; Johannes Blom, MD; Douglass C. Tormey, MD, PhD. Baltimore: The Williams and Wilkins Company, 1979, Pp 629. \$49.50.

As indicated in the title, this book attempts to be a guide to oncology rather than a definitive work on the subject. The first five chapters are used to establish the concepts of modern oncology upon which current multimodality therapeutic regimens are based. Knowledge of the natural course of various tumors as well as changing ideas of tumor biology have led to decreased use of radical surgical procedures in some situations, with chemotherapy or radiation therapy assuming a more prominent role

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Book Reviews (continued)

in treatment. An extensive discussion of basic ideas in immunology is presented with the suggestion that this modality may play an important role in future therapy. The chapters on radiation biology and the cell cycle are well done and informative and provide a good background for later discussions of treatment. A useful chapter giving chemical structures, pharmacology, and side effects of most of the present-day drugs is included.

Following these first chapters, which serve to give a brief overview of the principles of oncology, most of the remainder of the book is devoted to treatment of the various tumor types including the hematologic malignancies. Each section gives a brief natural history, staging evaluation, and discussion of available treatments for the various tumors. However, because the book was published in 1979, the treatment sections in some instances do not include the most current chemotherapy regimens and for this reason should be considered only an approximation of what is presently available. Lacking also are chapters specifically devoted to oncologic emergencies, management of infections in cancer patients, paraneoplastic syndromes, and management of patients with tumors of unknown primary.

This book will be useful to nurses, medical students, and practicing physicians when read for the natural history of tumors and general principles used in selecting approaches to patients with malignancies. However, it should not be relied on as the primary basis for treatment decisions. More complete and up-to-date works are available for that purpose.

*Robert P. Whitehead, MD
Assistant Professor of Medicine
University of Oklahoma Health Sciences Center
Oklahoma City, Oklahoma*

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OSMA Journal

Clinical Electroneurography: An Instruction to Nerve Conduction Tests. By M. P. Smorto and J. V. Basmajian. Baltimore: The Williams and Wilkins Company, 1979. Pp 298 with 224 figures, \$29.95.

The stated purpose of this volume is to survey the field of clinical electrodiagnosis for medical and paramedical people who deal with neuromuscular diseases. The book does indeed fulfill its stated purpose with a useful, practical kind of approach.

There are several aspects of this book that this reader found refreshing but which may not be desirable for some readers. For example, the initial chapter review of neurophysiology and neuroanatomy was mercifully short. The book is not, however, complete enough to substitute for an ordinary text on the subject. The first chapter also contains a compilation of significant dates in the historical development of electrodiagnostic techniques which a history buff might find interesting but which seems to be out of context with the rest of the book.

The strong points of the book are found in the chapters on techniques, which contain many practical hints that the novice would otherwise need considerable experience to acquire. These sections are clearly written and well illustrated, providing in most cases a handbook that could be used with ease by the beginner.

As an introductory volume, the chapters on differential diagnosis are necessarily brief. This is not necessarily a handicap for this type of book. However, it does mean that for more detailed information the reader is forced to look elsewhere. This eventuality is well provided for by the adequate literature citations and bibliography included in the text.

In my opinion this volume will serve very well as an introduction to the practical basis of electrodiagnosis in neuromuscular disease. It will be most useful for the novice or neurology resident beginning his electroneurodiagnostic training. It would also be useful for a review of the practical clinical basics for the more experienced. It will probably not be very helpful to the full time electrodiagnostician who will require more in-depth treatises on a given subject.

*John B. Bodensteiner, MD
Chief, Pediatric Neurology
University of Oklahoma*

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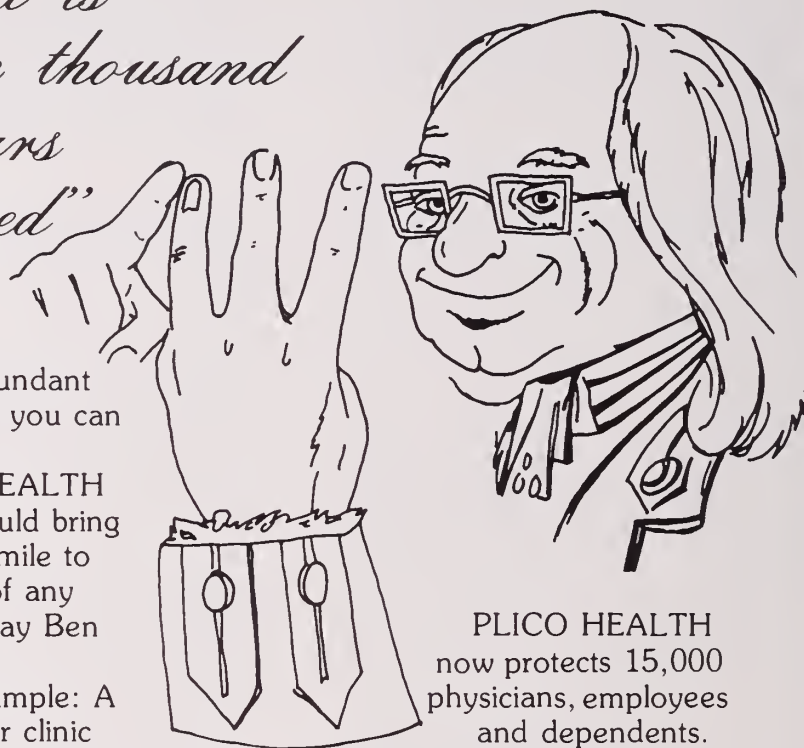
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Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving intral fluids, and during concurrent use with amphotericin B, corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe carefully for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the diuretic effect of nondepolarizing muscle relaxants such as curarane. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Anti-hypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual culus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on thiazide when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN, creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, metabolic acidosis (in hypokalemia), decreasing alkali reserve, possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Continue corrective measures and 'Dyazide' should be discontinued if values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use of chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function.

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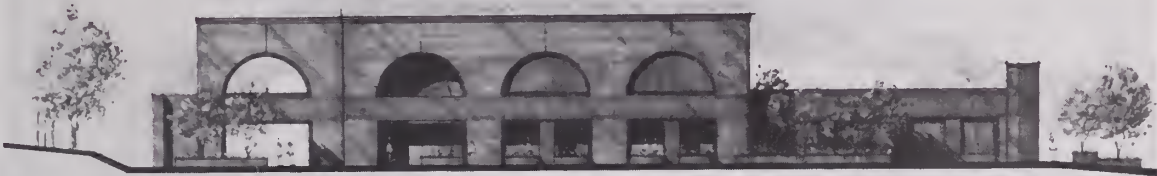


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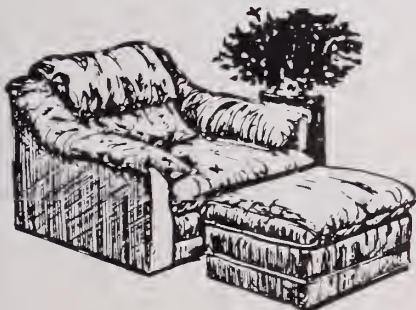
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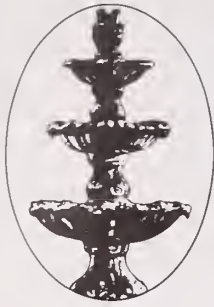
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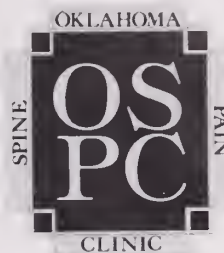
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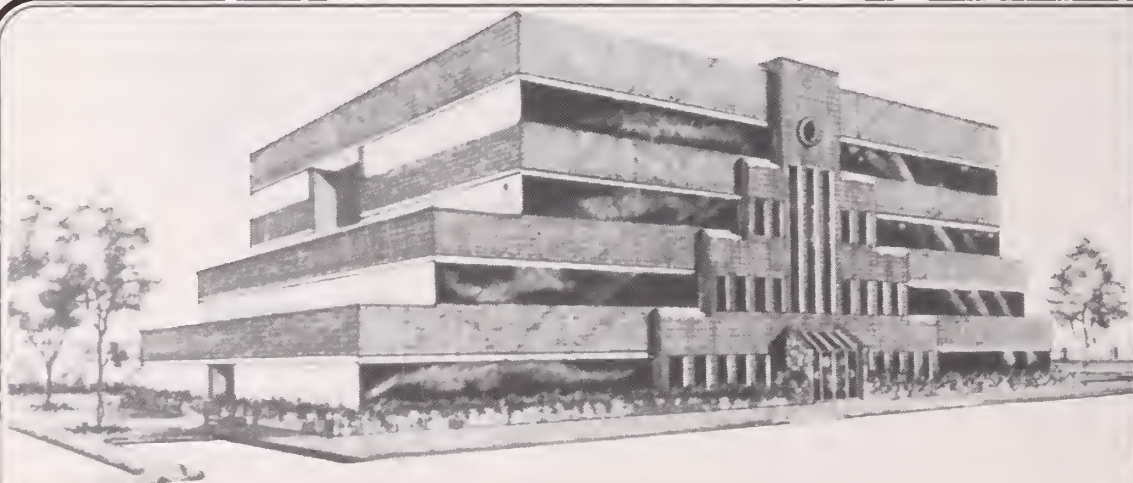
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NEWS

Members of the Oklahoma State Medical Association, the constituent societies of the association, and all readers in general are invited to supply news items of general interest to the profession.

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REPRINTS

Authors will receive reprint order forms from the Transcript Press, PO Drawer 1058, Norman, Oklahoma 73070, prior to final publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

BACK ISSUES

Microfilm copies of back issues of *The Journal* may now be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

Confluence '84

For the second year, and with support from the OSMA, the Oklahoma State Medical Association Auxiliary will sponsor "Confluence '84," September 10-11, 1984, at the Park Suite Hotel, Oklahoma City. Monday's program will feature Mr Morton A. Harris, attorney and special advisor, Muscogee County School District, and Dr Braxton A. Nail, superintendent, Muscogee County School District, Columbus, Georgia. Our speakers will discuss "Establishing a Health Improvement Program in the Elementary Schools." "HIP" (Health Improvement Program) involves 4th, 5th, and 6th grade children. Participants show improved overall health, less tardiness and absenteeism, and less interest in substance abuse. Georgia legislators have become very interested in "HIP" and our speakers will discuss this aspect also.

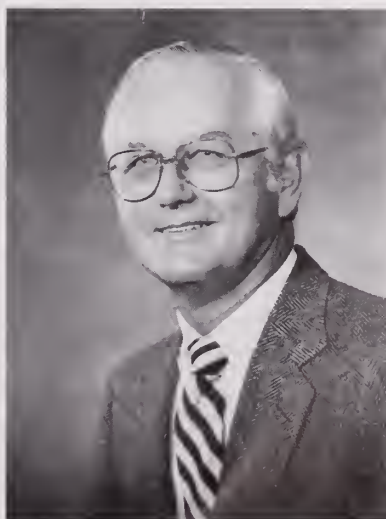
Tuesday's luncheon speaker will be Sherry Olson, director of "Contact-A-Friend" hotline

in Oklahoma City. Sherry will discuss the growing number of "latchkey" children and what we as auxiliarians can do to help them.

In addition to our speakers, the two-day confluence will include a slide presentation by Dr Carl R. Bogardus, a board meeting, and treasurers, AMA-ERF, legislation, and health projects workshops. All auxiliary members are encouraged to attend both days' activities. A block of rooms has been reserved for Monday evening, September 10. We are asking auxiliary members to invite their physician spouses, PTA leaders, local school superintendents and board members, and legislators for the Monday program. Advance reservations must be made for all meal functions. Space is limited. All speakers and workshops have been registered with the AMAA's PSD program and qualify for credit.



Morton A. Harris



Dr Braxton A. Nail

■ **A campaign encouraging physicians and members of their families to register and vote** has been launched by the AMA and the AMA Auxiliary. The voter registration drive, called MEDVOTE, is being conducted with assistance from state, county, and specialty societies. In some areas of the country, as many as 40% of eligible physicians have not registered to vote. At the time of the general elections in November, the AMA, Auxiliary, and American Medical Political Action Committee (AMPAC) will reinforce the registration with a "get out the vote" campaign.

■ **A search is underway** for members of the OSMA Physician Recovery Committee, a statewide committee of physicians concerned and willing to help other physicians impaired because of alcohol and/or drug dependency. The need is greatest for physicians, either recovered, recovering, or never impaired, in northeastern Trustee District I; the eastern counties of Trustee District IX, including Muskogee and Tahlequah; southeastern Trustee Districts X and XI; south central Trustee District XII; and the western counties of Trustee Districts XIII and XIV, including Altus, Anadarko, and Lawton. Suggestions of physicians willing to serve will be gratefully received by OSMA President James B. Eskridge III, MD, or OSMA Associate Director Mike Sulzycki. Please call toll-free 1-800-522-9452.

■ **A study of 33 psychiatric patients** with tardive dyskinesia (involuntary body movements induced by long-term use of antipsychotic drugs) showed that during a one-year period only one patient demonstrated complete reversal following discontinuation of antipsychotic therapy. "Since tardive dyskinesia was fully reversed in only one patient in our study, caution should be exercised in using neuroleptics in the first place, especially for the nonschizophrenic patients," say William M. Glazer, MD, of Yale University School of Medicine, and colleagues in the *Archives of Psychiatry*.

■ **Medical liability rates** increased last year as the frequency and severity of claims continued to rise, according to the American Medical Assurance Company. The average loss by settlement or judgment rose about 20%. As a result, 22 physician-owned companies raised premiums ranging from 6% to 30%. In 1984, at least 14 physician-owned companies (including PLICO) have increased rates again. Others are expected to increase premiums before the end of the year.

■ **The fastest growing age group** in the American population is the group aged 85 years and above, according to Edward L. Schneider, MD, of the National Institute of Aging. In the AMA's "Legislative Roundup," he reports that today only about 2 million men and women are in this category, but by the year 2050 there will be 16 million Americans age 85 and older. Meanwhile, the Census Bureau has reported that the number of Americans 65 and over is growing twice as fast as the population as a whole, 7.2% compared to 3.3%.

■ **The Oklahoma Regional Meeting of the American College of Physicians (ACP)** will be held at Shangri-La resort near Afton, Oklahoma, from Thursday, October 25, through Sunday, October 28, 1984. The meeting is one of nearly forty such sessions to be conducted across North America and parts of Central and South America this year. For details, contact William L. Hughes, MD, 1117 N Shartel, Oklahoma City, Oklahoma 73103, (405) 236-2491.

■ **The Oklahoma Physicians Twelfth Annual Winter Seminar** will be held this year at Copper Mountain, Colorado, from Wednesday, December 26, through Wednesday, January 2, 1985. Group rates on housing accommodations are being held for a limited time on a first come, first served basis. The course is certified for AMA and other credit hours. Registration information is available from Irwin H. Brown, MD, 5700 N.W. Grand Boulevard, Oklahoma City, Oklahoma 73112, telephone (405) 946-0548.

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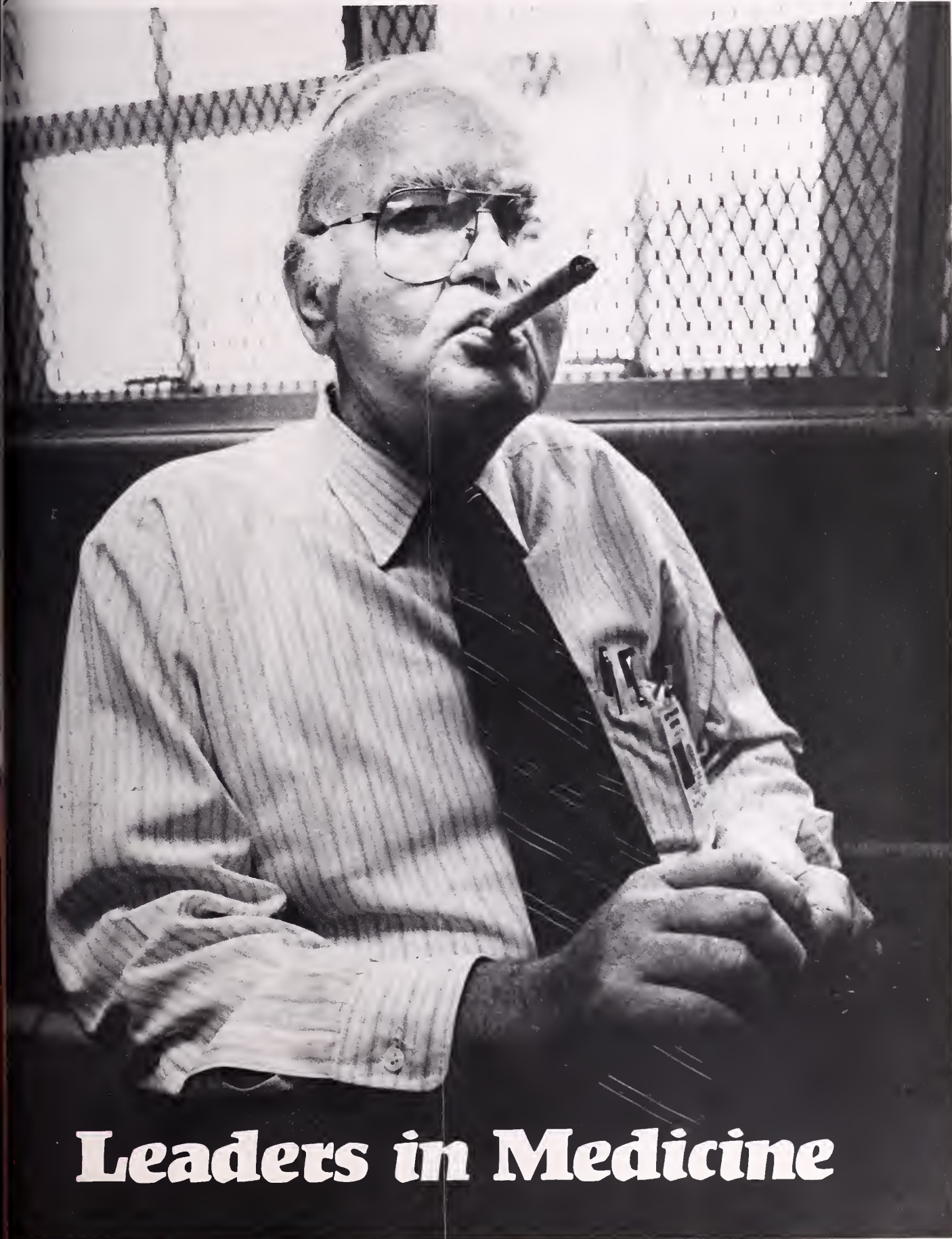
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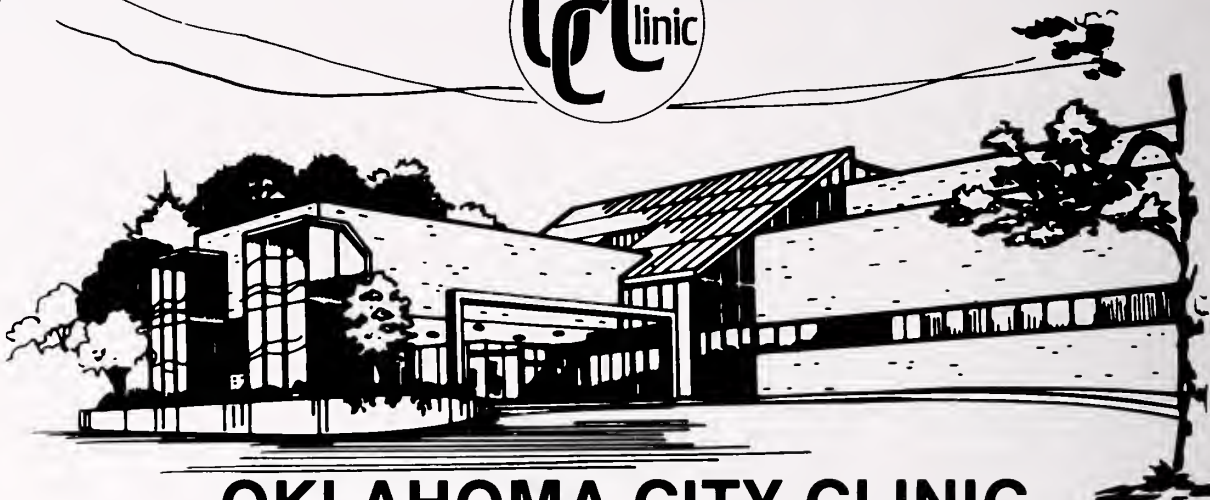
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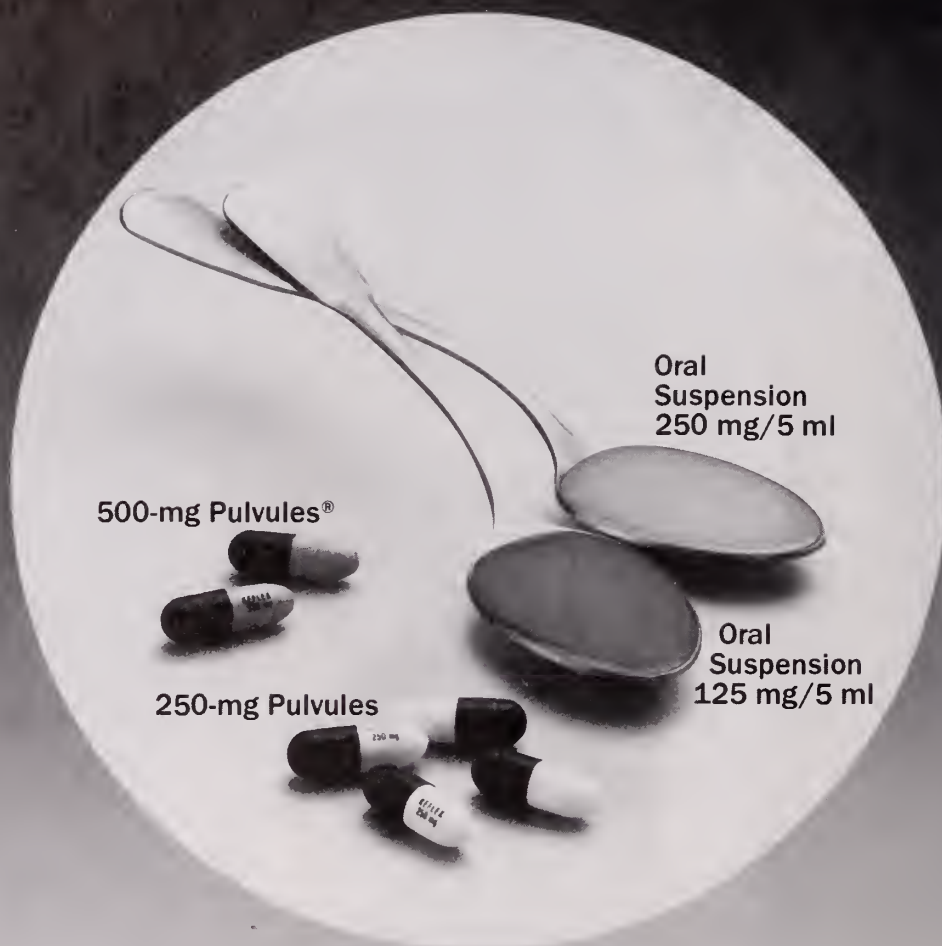
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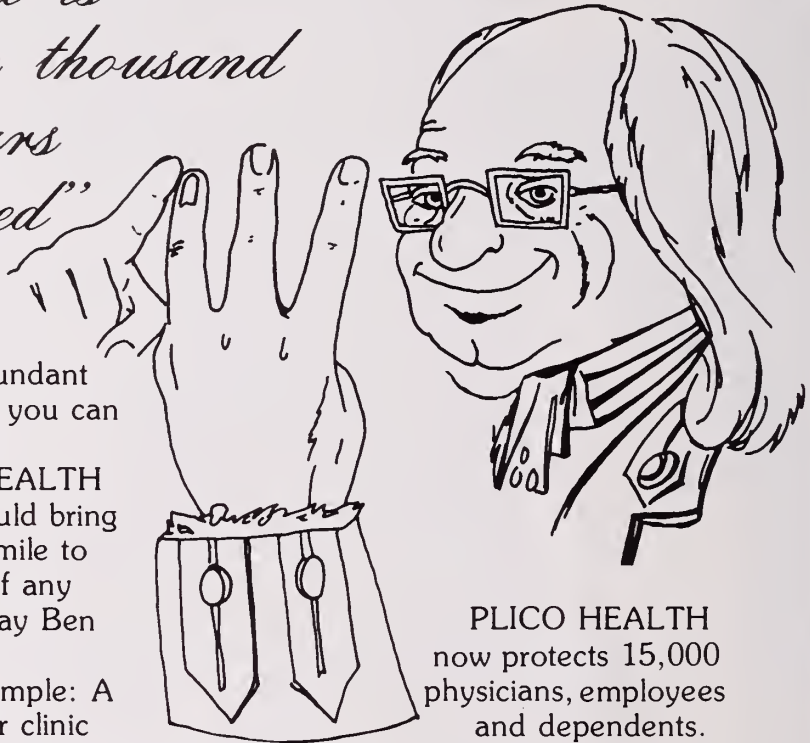
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What's the Antonym of "Cognitive"?

Would you like to know why Medicare is facing bankruptcy? Listen; I will tell you.

A 71-year-old patient calls my office and reports that, for the previous three days, he has experienced nausea and abdominal discomfort. He has had black, tarry stools. Just prior to his call, he vomited some material which looked like coffee grounds, after which he felt weak and sweaty.

Upon my advice, the patient's wife takes him to the emergency room of a local hospital. After the patient has been examined by the emergency room physician, I talk with the physician and learn that the patient "looks pretty good," that his vital signs are normal but the stool is black, tarry, and guaiac positive. I order his admission to the hospital intensive care unit with the diagnosis of "Intestinal bleeding, cause undetermined." The emergency room physician is kind enough to accept and record my orders.

Taking my office record with me, I go to the hospital and enter the patient's room. I abbreviate the history, confining my questions to those which can be answered by a nod of the head. I complete my cursory examination, visit with the patient's terrified wife and son, and write up my findings. Meanwhile, some of the results of the laboratory studies are reported. A borderline anemia, a slight reticulocytosis, and marginal elevations of total bilirubin and blood urea nitrogen. Everything else is completely normal.

I discuss with the patient and his family the need for two consultants; a gastroenterologist and, in case of need, a surgeon to stand by. The patient nods his consent.

The gastroenterologist reports before noon the following day. The results of his gastroscopic examination are essentially negative, but three areas were biopsied. Perhaps a CAT-scan and a colonoscopic examination would help define the cause of the illness. The patient's condition is good and he tolerates the procedure well. The surgeon, who sees him immediately following the study, agrees. He doesn't think he will be needed, but will continue to see the patient.

Repeat blood counts show no change. By the time I make my third visit, the patient is unhappy, gesturing that he wants the tube taken out of his nose. He sticks out his tongue and points to it before wiping it with the washcloth he holds. He displays the cloth to me. It is streaked with bright red blood.

"That's from the tube — taking it out and putting it back in," I say reassuringly.

He shakes his head in vigorous denial, marking the end of Medicare's coverage.

Everything — the emergency room visit, the laboratory studies, the hospital stay, the consultations, the intubations, the medications, the injections, the intravenous fluids, the gastroscopic examination, the biopsies, and the pathologists' services — everything to this point is considered partially or totally reimbursable under the current Medicare policies. What follows is considered a "cognitive service" and is virtually ignored or considered unworthy of reimbursement by the unenlightened, misguided bureaucrats who make such decisions.

"You mean your nose has been bleeding?" I ask my wide-eyed patient. "For how long?"

"For a week!" he gags. "My grandson accidentally hit it when we were playing touch football last week. It's still sore. I wonder if it's broken. It's bled a lot!"

I remove the tube as I ask the wife about the accident. The patient interrupts, clearing his mouth with the washcloth. "I didn't tell her because she would scold me."

Keep in mind, Medicare will pay me more for the few minutes it takes to do a proctoscopic examination than it will pay me for the two hours of "cognitive services" I render eliciting a complete medical history and doing a complete physical examination. It will pay me more for doing something to a patient than I can earn in determining whether it needs to be done.

Do you wonder why so many patients are having so many things done to them and so little done for them?

cognitive: based on or capable of being reduced to . . . factual knowledge. (Webster)

Do you wonder why our great leaders in Washington are insisting that cognitive services are worthless?

Do you wonder why Medicare is facing bankruptcy?

—MRJ

Am I My Brother's Keeper?

For many years, I've been interested in the Oklahoma City-based organization, World Neighbors, and the good works WN stimulates in underdeveloped areas of the world. John Peters, WN founder, once said early in WN history, in answer to the question "Am I my brother's keeper?" . . . "No — I'm my brother's brother!"



This self-help organization, over 30 years old now, has received no government money and works preferably with nationals who have had greater rapport with their peoples in India, Africa, and other underdeveloped areas. WN has offered "A hand-up, not a hand-out!"

As worthy as World Neighbors is, this page is not about WN but about something new in OSMA which embraces both "Brother's Brother" and "Hand-Up" concepts in different ways. I refer to the new Physician Recovery Committee and the Physician Recovery Program (PRP), born at the House of Delegates meeting in May.

Physicians who are afflicted with the disease of chemical dependency, including alcohol, have special and peculiar problems best understood, it seems, by other physicians who have walked the steps before. The PRP is a more aggressive approach to the solution of depen-

dency problems than that of the precedent Physicians Committee; recognition and salvage of the chemically impaired OSMA doctor and, indirectly, his family, medical practice, reputation, and material worth — but most of all, RECOVERY of his faculties of treating his patients appropriately.

This is no witch hunt, no coercive medical association discipline, but rather an attempt, motivated in love, to identify those among our ranks (usually estimated at up to 10%) impaired by *whatever* dependency and to firmly direct them to treatment programs. The Table of Organization is unimportant compared to the quality and dedication of those who have planned and will implement the program. About half of the statewide committee members will be recovering, themselves, from either alcohol and/or some type of drug dependency, hence are empathetic to the predicament of chemical dependency in their brothers.

Whatever the situation . . . no matter how hopeless it may seem . . . let the Committee know, honestly, of any member who needs PRP help. The Committee will expect your cooperation as each situation presented is investigated carefully before seeking to make personal contact and move toward recovery. Confidentiality will be vigorously guarded in all phases of the program.

RS Seidgel III, M.D.

Nephrostolithotomy

A New Operation

ROGER V. HAGLUND, MD
V. L. ROBARDS, JR, MD
JAMES R. LEACH, MD
J. STEVE MILLER, MD
JOHN B. FORREST, MD

Technique

Conventional open surgical removal of renal stones is being replaced in many instances by a percutaneous nephroscopic technique.

Percutaneous removal of stones from kidneys is rapidly challenging traditional open surgical pyelolithotomy and nephrolithotomy as the preferred method for removal of many stones. Instructional courses for nephrostolithotomy and other "endo-urolologic" techniques are currently popular with urologists. Prevalence of the operation seems to be most hampered by a shortage of specialized instruments. Indeed, perfection of suitable nephroscopes by the Storz and Wolfe companies of Germany enabled M. J. Marberger of Vienna¹ to develop the techniques which have been subsequently modified and popularized in this country by Segura,² Smith, Clayman, and others³. The term, "endo-urology" has been coined for endoscopic procedures on the kidney and upper ureter.

A nephrostomy is first established, usually under local anesthesia and fluoroscopic control for the percutaneous procedure. A needle is inserted to the appropriate calyx in the lower half of the kidney to gain access to the stone. A wire guide and catheter are then introduced through the kidney and down the ureter, if possible.

The nephrostomy tract is dilated to 24 or 26 French (8-9 mm) to permit insertion of a nephroscope or to 34 French (1.13 cm) for insertion of a larger sheath through which instruments are to be passed. The tract can be dilated acutely or over a period of several days. If acutely, either immediately or on the following day, general anesthesia is frequently desired for the dilation and the nephroscopic procedure.

After blood clots have been cleared from the field, the collecting system is visualized with a nephroscope (Fig 1) and the calculus or calculi located for removal with forceps, if possible. If larger than one centimeter in diameter, the transducer of an ultrasound generator (Fig 1) can be used to pulverize the calculus while the fragments are aspirated. An electrohydraulic lithotripter can also be used to shatter the stone.

When the endoscopic task has been completed, the nephroscopic sheath is removed and

Case Report

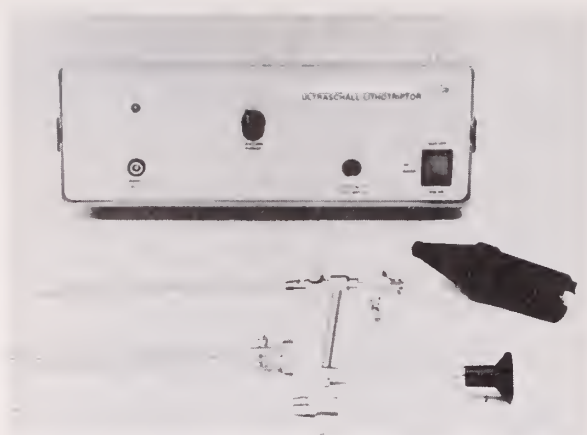


FIG 1. Nephroscope and ultrasound generator with transducer

a large Foley catheter is inserted as a nephrostomy tube. A nephrostogram is taken two days later and if the patient's condition is satisfactory, the catheter is removed and the patient dismissed. However, if a fragment of calculus remains, the patient can be nephroscoped again through the existing tract or the nephrostomy can be used to attempt chemolysis by irrigation of the kidney.

A twenty-four-year-old male was noted to have multiple calculi in his right kidney when evaluated for flank pain (Figs 2 and 3). Urinary infection was found to be due to *Klebsiella enterobacter* and he was treated with cephalosporin. A percutaneous nephrostomy was established under local anesesthesia. On the following day the nephrostomy tract was dilated to 34 French under general anesthesia. Thirty-three stones were removed with forceps (Fig 4). A twenty-four French Foley-Alcock catheter (3-way Foley) was used to replace the nephroscope, thus permitting continuous irrigation for excessive bleeding. A calculus was later noted in the distal ureter (Fig 5) and was removed by cystoscopic manipulation. Thereafter, the nephrostomy tube was removed and the patient dismissed.

Conclusions

A percutaneous operation is available for removal of kidney stones through a small instrument. Although not suitable for all stones, the procedure is bound to come into demand as a lengthy flank incision is avoided, hospitalization time is reduced, and morbidity is lessened.

900 Hillcrest Physicians Building, 1145 South Utica, Tulsa, Oklahoma 74104.



FIG 2. Preoperative scout film



FIG 3. Preoperative urogram

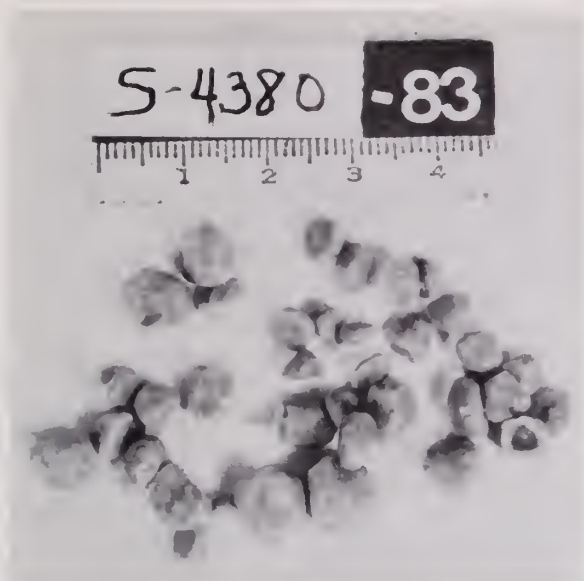


FIG 4. Stones

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A clinical assistant professor at Tulsa Medical



FIG 5. KUB film showing calculus in distal ureter

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Although the perfect history has never been taken by any physician, his careful, sympathetic, and discerning questions frequently yield information from the sick person which enlarges the doctor's horizon of knowledge and experience as well as presenting him with unexpected examples of the dramatic or bizarre.

—Martin H. Fischer
The Pharos of Alpha Omega Alpha

Treating Colds and Flu the Chinese Way¹

(First of two parts)

HONG LIU

Of all the experiences I have had in the twelve months of my visit to America, nothing has surprised me more than the general belief that there is no cure for common colds. Wonderment at this popular belief made me consult several medical books. My bewilderment increased when I found that the popular belief is endorsed by the medical profession. Vitamin C, liquids, balanced diet, aspirin, and bed rest — the commonly recommended treatment for colds — are considered “largely palliative,” with “poorly established merits.” As for influenza, fairly effective vaccine has been developed, but if the patient unfortunately contracts the disease, bed rest is the only treatment.²

As one who has always been cured by medication whenever afflicted with colds and flu in my native land, the People's Republic of China, I am not a little intrigued by this situation. I delved into my knowledge of traditional Chinese medicine and tried to explain how the Chinese could cure what the Western world is powerless against. A result of that effort is this article, which I hope will not only defend my

outlandish assertion that common colds and flu can be cured but will also shed some light on how the Chinese medicine works.

How Do the Chinese Classify Colds and Flu?

The terms *cold* and *flu* did not exist in Chinese vocabulary until the introduction of Western medicine at the turn of this century. The Chinese had a totally different way of classifying sickness. Superficially, diseases are grouped into three broad categories: sickness occasioned by outward causes, sickness occasioned by inward causes, and sickness resulting from physical injuries. This division of diseases corresponds with the theory of the major causes of sickness: outward causes, mainly changes in weather; inward causes, mainly changes in the mood but also including parasites, excess of body fluid, etc; and physical injuries.³

This theory of causes was formed thousands of years ago when the ancient Chinese doctors had no apparatus to aid them; tracing the objective causes in a laboratory was out of the question. The ancient Chinese doctors' acquaintance with sickness was restricted to the patient's

complaints and their observation of the patient through their five senses. Their treatment of sickness was experimentation with plants, mineral ores, insects, and fossils, while their explanation of the cure was a subsequent rationalization to establish a relationship between the group of symptoms and the treatment used.⁴ Such direct experimentation on man, though at a great price throughout the ages, has an enormous advantage over experiments on guinea pigs — treatments having side effects and not pertaining to the particular sickness or human constitution are quickly spotted and discarded. Thus, when disease is diagnosed and treated correctly, Chinese medicine seldom has any side effect.

As doctors, the ancient Chinese were as eager as their modern counterparts to delve into the causes of sickness. They could not observe the inner workings of the human body, so they concentrated on observing the changes in the patient's immediate environment. Explanations resulting from such investigations always fell into the three categories mentioned earlier. As no other way of tracing the origin of sickness was available, the explanations were soon considered concrete causes; and the theory was formed.

Examined by the modern scientific eye, the theory is unbelievably primitive.⁵ It stands to reason that, once a more enlightened theory is offered, this ancient crude version should be discarded. *It would be so if the ancient theory did not support thousands of years of successful practice.* As it is, the Chinese medical philosophy cannot be thrown away without changing the entire practice, which, though based on a crude philosophy, has, throughout the years, developed enough practical theory by direct experiment on man to be at times more effective in physical medicine than its Western counterpart. Thus today, long after the first introduction of modern Western medicine, Chinese doctors still do not use the terms *cold* and *flu* to classify and prescribe medication for the two ailments, even though the terms are commonly used in everyday life.

In Chinese medicine, colds and flu are grouped under the category "sickness occasioned by outward causes." This category includes all sickness having a fever and a disturbed pulse at the first level.⁶ As can be easily seen, this definition is too broad to be taken as the name for a specific disease or even a specific kind of disease. Within the broad category, sick-

ness is further divided into two groups — disease in the initial stage with fever as the main symptom, where the removal of fever often results in cure; and disease in the later stages with fever as a minor symptom, where removal of fever does not end in recovery. Colds and flu belong to the first group.⁷

Besides the three broad categories of disease, Chinese medicine has another system of classification that is always combined with these categories in forming a diagnosis. This classification divides disease into two kinds — sickness occasioned by cold disease-causing agents and sickness occasioned by hot disease-causing agents.⁸ Three factors are important in judging sickness according to this classification: the season, the patient's constitution, and the symptoms.

Generally, sickness occasioned by cold disease-causing agents are more prevalent in cold weather than those occasioned by hot disease-causing agents, while the reverse is true in hot weather, though the patient's peculiar constitution may cause variation. As for the patient's constitution, it is well known that Chinese medicine considers the healthy person as having the proper balance of Yin and Yang, which means, respectively, body fluid (coldness) and vital energy (heat). Few people really attain this ideal balance; their constitutions lean either toward the Yang (thin, energetic) or toward the Yin (flabby, pale, and physically

**Chinese medicine
divides all sicknesses
into two categories —
those of cold origin
and those of hot
origin.**

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weak), thus making them susceptible to sickness originated by the reverse characterized disease-causing agents.

Important as the weather and constitution factors are, they are subordinate to the consideration of symptoms. Abhorrence of coldness,⁹ the color of the tongue and its coating, the pulse rate, the presence or absence of thirst, the color of the face, and the degree of fever are generally the most important differentiating symptoms.¹⁰

The Basic Type of Sickness Caused by Either Hot or Cold Disease-Causing Agents

The great difference between sickness of hot origin and sickness of cold origin lies in one symptom — abhorrence of coldness. This symptom is prevalent throughout the course of illness of cold origin, while the reverse is true in disease of hot origin. The patient may, at the onset, feel a slight abhorrence of coldness which will normally quickly disappear, maybe in half a day or a day. From then on, all the symptoms would normally manifest excessive heat in the body.

In a typical case of sickness caused by cold disease-causing agents, the patient complains of a terrible abhorrence of coldness, a fever, a headache, a stiff and aching neck, a blocked and running nose, an itching throat, sneezing, and a cough. Examination of the patient shows a disturbed pulse at the first level and a watery tongue with the normal pinkish red color. The main thing a doctor would be concerned about at this point would be whether the patient had sweated. If he had, the fever would be relatively low, while if he had not, the fever would be high and the pulse tense. A high fever would require profuse sweating as cure, while, if the patient had already sweated, a slight sweating would suffice. Absence of previous sweating can lead to such additional symptoms as aching skin and joints and asthmatic difficulty in breathing while, at the same time, increasing the severity of the above symptoms.¹¹

A patient's "abhorrence of coldness" is the key to an accurate diagnosis.

The most basic type of sickness in the hot-origin group generally has the following symptoms: a high fever; a headache; a blocked nose; a tongue that is either redder than normal as a whole or has heightened color along the edges; thirst and a craving for cold drinks; a sore, red, and swollen throat; sticky, yellow sputum; a slightly yellow coating on the tongue; and a fast, disturbed pulse at the first level. The high fever is not, like the basic sickness of cold origin, caused by absence of sweating. The

patient may have sweated before or is sweating slightly. The fever is due to excessive heat in the body as shown by most of the symptoms.¹² Treatment in such cases is concentrated on eliminating the excessive body heat.¹³

These two cases present the most basic types in the hot and cold groups of sickness. There are no complications. However, the patient's peculiar constitution and the rarity of affliction by a single type of disease-causing agent — which, in the case of sickness caused by outward causes, is a change in weather — often causes variations in the basic types. A combination of "dampness"¹⁴ with either the cold or the hot disease-causing agents presents the most commonly seen variations. "Dampness" manifests itself in such symptoms as a heaviness of head, unexplainable weariness and heaviness of the body, a stifling feeling in the chest, aching joints, a sense of tastelessness in the mouth, a constant feeling of nausea, and attacks of loose bowels. Long as the list is, the patient seldom presents all the symptoms at one time.¹⁵

Another group of most commonly seen variations arises from the extreme conditions of the patients' constitutions. Patients deficient in Yang — vital energy — may present weak body resistance, requiring tonic herbs to accompany the normal prescription, while patients deficient in Yin — body fluid — may present dangerously dehydrated conditions owing to the excessive heat in the body, requiring drastic efforts to eliminate the heat and restore the normal amount of body fluid.¹⁶

Endnotes

1. A computer search of Medline and Embase data bases shows that only two articles have been written on the Chinese treatment of common colds and flu since 1966. One article published in the April, 1978, issue of the *American Journal of Chinese Medicine* (pp 187-205) is titled "New Medical Therapy for the Common Cold, Influenza, and Bronchitis." The new therapies mentioned are products of the trend to force Chinese medicine into the pattern offered by Western medicine, a vogue fairly fashionable ten years ago. None of the treatment mentioned in the article ever became popular or even widely known. The second article was published in the January, 1981, English issue of the *Chinese Medical Journal* (pp 35-40) and is titled "Effect of Radix Astragali Seu Hedysari on the Interferon System." The article is a report on a laboratory research showing scientifically that milk vetch (*Radix astragali seu hedysari*) is good for the common cold, "especially . . . [for] those with chronic bronchitis," whose "lung" has been weakened by the chronic disease.

2. Ernest Jawetz and Moses Grossman, "Introduction to Infectious Diseases," in *Current Medical Diagnosis and Treatment 1983*, ed Marcus A. Krupp and Milton J. Chatton (Los Altos, California: Lange Medical Publications, 1983), p 809.

3. There are six major elements in weather: wind, coldness, sunstroke-giving heat, dampness, dry heat, and fierylike heat. Major states of mood include sadness, brooding, happiness, anger, sorrow, horror, and shock.

4. I used the word *herb* here to cover all the components of medication in Chinese medicine, including mainly plants, minerals, insects, and fossil.

5. Ignorance was largely responsible for the crudeness of the theory. However, the preservation of the theory in its primitive condition was due to other historic limitations. Religious adherence to the style used by early doctors played a great part in obstructing new discoveries. For fuller discussion, see the part under the subtitle "Some Defects in Chinese Medical Practice."

6. Chinese medicine divides the pulse into three levels: upper, middle, and lower. The levels correspond to the grades of body defense and the stages of sickness. When body resistance is strong and sickness is at its initial stage, only the first level of the pulse would be disturbed.

Besides the levels, Chinese medicine has a collection of modifiers which designate the different sensations of the fingers when feeling the pulse. To facilitate understanding, I will use accompanying phrases to explain the varieties of the pulse the first time they are mentioned in this article.

7. Half of the practical Chinese medical philosophy and at least three-fifths of the approximately 400 standard prescriptions in Chinese medicine deal with the sickness occasioned by outward causes. The two medicines' different systems of classification make it impossible to equate Western names of sickness with those of Chinese; however, when only symptoms are considered, sickness originated by outward causes covers most of the infectious diseases and the initial stage of some acute type of chronic disease, eg, rheumatic arthritis and glomerulonephritis.

Actually, Chinese medicine does not differentiate between disease in the initial stage, with fever as the main symptom, and disease in later stages, with fever as a minor symptom. I made this distinction to clarify understanding and avoid cluttering the article with irrelevant information. The only distinctions Chinese medicine makes within the category are the nature of the sickness and its various phases of development. The groups of symptoms — of which a few correspond to those of colds and flu — belong to the initial stage. Subsequent variations or complications of the sickness — for which Western medicine would designate different names — are considered the later developed stages of the same sickness. This peculiar system of classification necessarily reduced the number of disease names in Chinese medicine.

Based on observation of the most drastic changes in nature, which tend to affect strongly the physique of human beings, Chinese medicine divides all sickness basically into two categories — those of cold origin and those of hot origin. Two major Chinese medical classics — *Shan Han Lun, The Tract of Disease Caused by Cold Disease-Causing Agents*, and *Wen Re Lun, The Tract of Disease Caused by Hot Disease-Causing Agents* — divide the sickness occasioned by outward causes into two groups and summarize both groups' possible developments. (For years the title of the first classic was mistranslated into *Typhus Fever*. The term *shan han* is interchangeable for both interpretations.)

The Tract on Disease Caused by Cold Disease-Causing Agents groups sickness into six stages. Sickness strikes at the first stage, and is either cured at that or subsequent stages, or develops chronologically through to the last stage, or combines the characteristics of several stages concurrently. Sometimes, however, sickness may skip the initial stage and plunge straight into later stages.

The initial stage is characterized by a fever, a headache, a stiff and aching neck, a tense pulse at the first level, and abhorrence of coldness. The types of sickness caused by cold disease-causing agents mentioned in this article belong to this stage.

The second stage is characterized by a high fever, profuse sweating, abhorrence of heat, extreme thirst and craving for cold drinks, and a fast, strong pulse. All these symptoms manifest excessive heat, caused by the disease-causing agents losing their original coldness in the process of invading the interior of the body.

The third stage is characterized by alternating fits of fever, abhorrence of coldness, a bitter taste in the mouth, a dry feeling in the throat, dizziness, irritability, a constant feeling of nausea, loss of appetite, and a taut pulse and a stifling feeling in the chest and the regions along the ribs. (According to the symptoms, the third stage should be a transition between the first and the second stages. It has the typical symptoms of the first stage — fever and abhorrence

of coldness — and some of the excessive heat symptoms of the second stage, though not so strong — a bitter taste in the mouth and a dry feeling in the throat. Clinically, the third stage seldom develops from either the first or the second stage. Most of the time it exists as a type of sickness by itself, though occasionally it does develop from a slight case of the first stage. When treatment is delayed, instead of developing into a different stage, the symptoms of the third stage simply intensify; the coating on the tongue may turn yellow, the pulse may become more taut, and sometimes constipation may appear. At such times, the symptoms resemble those of certain types of jaundice, infectious hepatitis, cholecystitis, and pancreatitis. The classic's mistaken arrangement of the first three stages shows that the order of development it expounds is more imagined than real.)

The fourth stage is characterized by absence of fever, terrible abhorrence of coldness, distension of stomach and belly, loose bowels,

“Dampness” is the most common cause of variations in symptoms.

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or, sometimes, a stomachache that subsides a little when pressed with a warm hand, absence of thirst, nausea, total absence of appetite, a weak pulse, and a normal temperature in the extremities.

The fifth stage is characterized by absence of fever, terrible abhorrence of coldness, cold extremities, loose bowels with the discharged waste in totally undigested form, weariness and sleepiness, and a small, weak, and dying-out pulse. The last stage is characterized by alternative warmth and coldness in the extremities and a general mixture of cold and hot symptoms: thirst (hot), a feeling of heat in the chest (hot), hunger but no inclination for food (cold), and, sometimes, vomiting of ascaris (cold).

Chinese medicine believes that fever is caused by the struggle between the body resistance and the disease-causing agents. Though it is the main symptom, the presence of fever reassures the existence of strong body resistance and is therefore a good sign. Absence of fever normally is an ominous signal, especially when terrible abhorrence of coldness, cold extremities, and loose bowels with the discharged waste in totally undigested form are prominent symptoms. Fever is present in the first three stages, while it is absent in the last three stages.

The hot symptoms in the last stage are not caused by strong body resistance or excessive heat. The warmth in this case is the vitality which is being pushed out by the disease-causing agents. The hot symptoms are false because the body is already so weak that it could not digest food — the reason for the disinclination for food — and so cold in the interior that ascaris is vomited. If the period of warmth in the extremities is longer than that of coldness, the patient may still have a chance of revival; otherwise, the patient is beyond hope.

The Tract of Diseases Caused by Hot Disease-Causing Agents has another system of classification; it groups sickness into four stages. The different variations of sickness caused by hot disease-causing agents mentioned earlier in the article characterize the first stage.

A high fever, absence of abhorrence of coldness, thirst, and yellow coating on the tongue characterize the second stage. Additional symptoms at this stage include constipation, or, sometimes, uncontrollable outflow of fluid from the burning anus (excessive heat in the colon); a bitter taste in the mouth; quick alternations of coldness and fever; nausea, or a constant feeling of nausea; distension or aches in the region of stomach and ribs, which get worse when touched (excessive heat in the “gall bladder”); or a high fever that subsides a little after each sweating; weariness and heaviness of the body; a stifling feeling in the chest; no appetite and a constant feeling of nausea; loose bowels; yellow coating on the tongue; and

a fast, sluggish pulse (a combination of "dampness" and excessive heat affecting the "stomach" and the "spleen").

The third stage is characterized by delirium or unconsciousness, a fever that goes up regularly at night, a dry feeling in the mouth but no inclination for drink, a slight suggestion of rash, bright red or dark red tongue, and a small, fast pulse. The fourth stage is characterized by a high fever, restlessness or violence while unconscious, ravings, convulsions, outbreak of rash, tongue in the darkest shade of red, and hemorrhage, either through vomiting, coughing, nose, stool, or urine.

As can be seen easily, the last two stages denote the terminal or crisis phase of sickness. Chinese medicine believes that the alarming symptoms result from the excessive heat's invasion of the blood and the "heart," a concept which includes, besides the physical heart, part of the blood circulation and the greater part of the central nervous system. Treatment is to use herbs particularly effective in eliminating excessive heat without taxing the almost-burned-up body fluid. Normally, if treated in time and correctly, sickness could be cured before it develops into the last two stages. However, with patients deficient in Yin — body fluid — sickness may develop into the last two stages soon after the onset, sometimes even before the patients get to the doctor.

Generally, sickness caused by cold disease-causing agents has fewer variations and is normally less serious than sickness caused by hot disease-causing agents, which is far more contagious and often spreads into epidemics.

I made this brief survey of the scope of sickness occasioned by outward causes to illustrate how Chinese medicine identifies sickness, believing it will further clarify how colds and flu are classified in the ancient medicine.

8. The term "disease-causing agents" is coined for this article. Unable to trace the objective causes of sickness and being partly influenced by superstition, the ancient Chinese termed all the causes of disease "evil." Though the term carries superstitious connotation, Chinese doctors used it throughout the centuries more for lack of a better term than for superstitious reasons. At present, "evil" is the standard term for translation. However, I choose to use the term "disease-causing agents," which, though not a great deal more specific than the standard counterpart, at least clears the ancient medicine of any possible charges of superstition.

9. The term "abhorrence of coldness" is used to cover the symptoms of sensitivity to coldness. The symptoms include chilliness, goose-skin, shrinking from anything cold to the touch, avoiding cold drinks, shivering, and feeling drafts when healthy people can detect little movement of the air.

10. When the patient is afflicted with sickness originated by cold disease-causing agents, he will pile layers of clothes on himself and shrink from touching anything cold. His tongue will be large and tender, and its color will be pink, while the coating will be white and maybe watery. His pulse rate could be normal, slow, or tense. He will hardly be thirsty, but, on rare occasions, when he is, he will ask for *hot or warm* drinks, and only sip a little. His face would likely be pale. His fever, if he has one, would normally be relatively low, though occasionally lack of sweating can cause a high fever accompanied by a flushed complexion, a cough, watery phlegm, and itchiness in the throat. On the other hand, if the patient is afflicted with sickness occasioned by hot disease-causing agents, he will not be afraid of coldness or he may have been afraid of coldness at the onset but quickly lost that symptom. He may wear less than normal layers of clothes. The color of his tongue or just the tip of the tongue will be red, with or without yellow coating. His pulse rate will be faster than normal. He could have a sore throat, a cough, and yellow phlegm. He will be thirsty and might crave cold drinks. His face will likely be flushed. And his fever will be fairly high.

11. There are two prescriptions for the basic type of sickness caused by cold disease-causing agents. The first is mahuang prescription which consists of mahuang (*Herba ephedrae*), cassia twigs (*Ramulus cinnamomi*), apricot kernel, and honey-cured licorice root (*Radix glycyrrhizae*). The second is cassia twigs prescription which consists of cassia twigs, root of herbaceous peony (*Radix paeoniae alba*, sour and cool-property), fresh ginger, Chinese dates (sweet and warm-property), and honey-cured licorice root. Mahuang prescription is used *when the patient has had no previous sweating, a*

high fever, aching joints, tight and aching skin, and a cough. In this prescription, mahuang and cassia twigs are used for causing sweat, apricot kernel for the cough, and honey-cured licorice root to restrain the drastic effect of the mahuang and cassia twigs combination. Cassia twigs prescription is used *when the patient had sweated previously or is sweating slightly with consequently less severe symptoms.* Fresh ginger helps cassia twigs in bringing up the body temperature, while the root of herbaceous peony, honey-cured licorice root, and Chinese dates all, in varying degrees, soften the effects of the other two herbs.

Frequently, the patient has only a slight case of the basic type: a slight abhorrence of coldness, no previous sweating, a slightly stuffed nose, an itching throat, a slightly dry cough, a watery tongue with the normal pinkish red color, and a slightly disturbed pulse at the first level. A prescription named green onion and preserved soybean prescription, consisting only of those two herbs, is used for the slight case of the basic type.

When complications in a slight case arise, certain spicy, warm-property, and sweat-causing herbs are used to deal with the special symptoms: leaf of purple perilla (*Polium perillae*) specializes in curing cough and a stifling feeling in the chest, dahurian angelica (*Angelica anomala*) specializes in curing blocked nose and headaches that concentrate in the forehead, ligusticum (*Nothosmyrnium japonicum*) specializes in curing headaches that concentrate on the

Patients deficient in Yin and Yang may be at greater risk.

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top of the head, fanfen (*Radix ledebouriellae*) specializes in curing aching joints and itchy rashes, and jingjie (*Herba schizonepetae*) specializes in curing headaches, bloodshot eyes, and swollen and sore throat.

12. Heightened color — flushed face, red lips, red or scarlet tongue — thirst, and craving for cold drinks generally signal the presence of excessive heat in the body. See footnotes 7 and 10.

13. The herbs generally used for eliminating excessive heat are honeysuckle flower (*Flos loniceræ*), weeping forsythia (*Fructus forsythiae*), primarily eliminating the heat from the body; gypsum (*Gypsum fibrosum*), eliminating heat and curing insatiable thirst; bamboo leaves, common reed rhizome (*Rhizoma phragmitis*), eliminating heat, stopping thirst, and getting rid of excessive body fluid through urine; achene of great burdock (*Fructus arctii*), root of balloon flower (*Radix platycodi*), licorice root (*Radix glycyrrhizae*), primarily clearing the swollen throat and eliminating sputum; white mulberry leaves (*Folium mori*), chrysanthemum, primarily clearing headaches; fritillary bulb (*Bulbus fritillariae thunbergii*), peel of Mongolian snakegourd (*Pericarpium trichosanthis*), primarily dealing with cough and yellow sputum; talc (*Talcum*), lotus leaf (*Folium nelumbinis*), Job's tears (*Semen coicis*), eliminating excessive heat through urine without taxing the body fluid; root of straight ladybell (*Radix adenophorae strictae*), pear peel, root of American ginseng (*Radix panacis quinquefolii*), generating fluid; capejasmine (*Fructus gardeniae*, bitter and cold-property), very effective at eliminating excessive heat accumulated in the chest; root of Chinese trichosanthes (*Trichosanthes japonica*), root of rehmannia (*Radix rehmannia*), root of Zhejiang figwort (*Radix scrophulariae*), tuber of dwarf lily turf (*Radix ophiopogonis*), generating fluids in an emergency; and swallowwart (*Radix cynanchi atrati*), noted for eliminating heat without taxing the body fluid. None of these herbs is spicy, a taste that normally taxes body fluid.

Unlike the sickness occasioned by cold disease-causing agents, which tends to stay static for a period of time, sickness originating from hot disease-causing agents develops quickly. For this reason, few prescriptions are standardized at the initial stage. Most of the time, doctors make up their prescriptions according to the patient's symptoms and the herbs' nature and effects. However, there are two standard prescriptions. Honeysuckle flower and weeping forsythia prescription (honeysuckle flower, weeping forsythia, preserved soybean, jingjie, peppermint, achene of great burdock, root

of balloon flower, licorice root, bamboo leaves, and common reed rhizome) is considered effective for the basic sickness, while white mulberry leaf and apricot kernel prescription (root of straight ladybell, pear peel, root of American ginseng, apricot kernel, fritillary bulb, cape jasmine, preserved soybean, and white mulberry leaf) is regarded as good when sickness is caused by a combination of dry heat and hot disease-causing agents (see footnote 15).

14. "Dampness," a term to denote certain weather conditions, is used in Chinese medicine to name the excessive body fluid condition in a patient. Chinese medicine believes that excess humidity in either the weather or the patient's dwelling place often results in the patient's accumulating an abnormal amount of body fluid.

15. For sickness of cold origin, only one combination with "dampness" is commonly seen. In this case, the patient normally has some of the following symptoms besides those of the basic sickness: a heaviness of head, unexplainable weariness and heaviness of the body, a stifling feeling in the chest, aching joints, a sense of tastelessness in the mouth, and maybe a constant feeling of nausea or attacks of loose bowels. An examination of the patient shows a soft, small, and at times taut, pulse at the first level and a normal-colored tongue with thick, sticky white coating.

Several herbs having the effect of drying up excessive sputum and "dampness" are frequently used with Chinese atractylodes (*Atractylis lancea*) to cure the "dampness" variation: fangfen (*Radix ledebouriiellae*), bark of official magnolia (*Cortex magnoliae officinalis*), pinella (*Rhizome pinelliae*), dried orange peel, tuckahoe (*Pachyma cocos*), and umbellate pore fungus (*Umbellate pore fungus*).

Another variation of the basic type of sickness due to cold origin frequently occurs when treatment is delayed. The patient may still abhor coldness and has a fever, but he will also have such hot symptoms as irritability due to a feeling of excessive heat in the chest; thirst; sore throat; dry, quick cough; sticky yellow coating on the tongue; and sometimes sudden loss of voice. Such change in symptoms is called "heat wrapt in coldness," the explanation being that, in invading the interior of the body, part of the cold disease-causing agent became warm and lost its original coldness.

For the "heat wrapt in coldness" variation, a prescription called mahuang, apricot kernel, gypsum, and licorice root prescription is normally used. The prescription consists only of these herbs. Gypsum quenches the excessive heat, mahuang takes care of the cold symptoms, apricot kernel cures the cough, while licorice root puts a restraining hand on all the effects.

For sickness of hot origin, three types of combinations with "dampness" are commonly seen. When the basic sickness is combined with "dampness," either due to the weather or the living conditions or the patient's original excessive body fluid constitution, such additional symptoms may be seen: heaviness of head, overall heaviness and weariness in the body, a stifling feeling in the chest, a constant feeling of nausea, yellow urine, and sticky yellow coating on the tongue. The last two symptoms and the basic symptoms differentiate this variation from its counterpart in the cold origin group.

When the basic sickness is combined with "dampness" and sunstroke-giving heat in summer, the following symptoms are commonly seen: abhorrence of coldness, a relatively high fever, sweating, heaviness and weariness in the body, thirst, short and red urine, sticky and yellow coating on the tongue, and a fast pulse that somehow gives the sensation that it moves sluggishly along the blood vessel. This group of symptoms occurs often when the weather is stifling hot and humid.

Another variation of the basic sickness, also due to "dampness" and excessive heat, may have the following symptoms: a low fever that runs up regularly in the afternoon; a headache; the head feels dizzy and heavy as if it were wrapt in a thick turban; weariness and heaviness in the limbs; a stifling feeling, or sometimes a sensation of hard objects, in the chest and stomach region; a sticky feeling in the mouth; not thirsty; sticky, white coating on the tongue; and a slow, sluggish pulse. This group of symptoms is often seen in summer and fall. This variation is far more contagious than the one above and is not so easily cured because of the excessive sticky "dampness" shown by the symptoms, which is far harder to clear than the excessive heat. This group of symptoms seems to resemble those in the initial stage of typhus fever, salmonellosis, and acute

infections of the stomach and the intestines.

Another variation may be caused by a combination of the disease-causing agents of the basic type with dry heat like that usually seen in the fall. Under such circumstances, the patient would have the following additional symptoms: a dry cough, a sensation of dryness in the throat and mouth, thirst, an abnormally redder tongue with little fluid or coating on the surface, a sensation of excessive heat in the chest resulting in irritability, and a slightly fast pulse. The additional symptoms all show that a dry heat is quickly burning up the body fluid. Treatment would be to eliminate the heat and to make up the loss of body fluid.

For a list of the herbs used for these variations see footnote 13.

16. Under normal healthy conditions, people deficient in Yang are always pale, flabby, easily tired, sleepy, very sensitive to coldness, and generally have difficulty maintaining normal body temperature. When these people come down with sickness caused by cold disease-causing agents, they not only have a relatively low fever and a terrible abhorrence of coldness, but they also frequently have such additional symptoms as overall weariness; shortness of breath; little inclination for conversation because of weariness; a large, tender, and pale pinkish tongue; and a weak disturbed pulse at the first level. At such times, pure sweating is not advisable as a cure. Such treatment may end with the patient fainting or even dying from excessive sweating. Pure sweating as a cure must definitely be prohibited if the patient has the following symptoms: bloodless lips and complexion, a pale and abnormally large tongue, small and low voice, cold extremities, and a weak pulse that can be felt only at the third level. Treatment in the first case is to use tonics together with sweat-causing herbs, while, in the second case, bringing up the body temperature is far more important than anything else.

Dangshen (*Radix codonopsis pilosulae*, an inferior kind of ginseng), large-headed atractylodes (*Rhizoma atractylodis macrocephalae*), and milk vetch (*Radix astragali seu hedysari*) are used frequently with whatever prescription the symptoms justify for patients deficient in Yang — vital energy. The herbs normally used for bringing up the body temperature in emergencies are monkshood (*Radix aconiti praeparata*), bark of Chinese cassia tree (*Cortex cinnamomi*), and dried ginger. These three herbs belong to the spiciest and hottest propertied category.

Just as people deficient in Yang — vital energy — have special symptoms, so do those deficient in Yin — body fluid. These people are normally thin, energetic, and more sensitive to heat than coldness. When such people come down with sickness of hot origin, to which they are more susceptible than that of cold origin, they often have the following additional symptoms: dizziness, a sensation of excessive heat in the chest resulting in irritability, thirst, a feeling of dryness in the throat, a dry cough, little or no sweating, burning palms and soles, a redder than normal tongue that is abnormally smaller and thinner, and a small, fast pulse. The last three symptoms show that the body is dangerously drained of body fluid, which makes this group of symptoms far more serious than the one above. Replacing lost body fluid should be the prime concern in treatment. The herbs generally used are bamboo leaves, achene of great burdock (*Fructus arctii*), peel of Mongolian snakegourd (*Pericarpium trichosanthis*), drug solomonseal (*Rhizoma polygonati odorati*), root of rehmannia (*Radix rehmanniae*), root of Zhejiang figwort (*Radix scrophulariae*), tuber of dwarf lilyturf (*Radix ophiopogonis*), and swallowwort (*Radix cynanchi atrati*).

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Leaders in Medicine

Edward K. Norfleet, MD

Story by VAL THIESSEN
Photographs by J. DON COOK

I had some notion of what Ed Norfleet was like before I met him. He'd been described as a big, no-nonsense man, with clear, direct eyes and an almost legendary record of service to Oklahoma medicine.

I thought of this as I drove the ribbon of road between Oklahoma City and Vinita, Dr Norfleet's new home. I thought, too, of the words of a friend and admirer of his:

"He's a deceptive man. There are times when, if you aren't very careful, you'll wonder if he has both oars in the water, and then suddenly discover that he's being absolutely brilliant."

I found Dr Norfleet at his work in Vinita. He is presently senior staff psychiatrist at Eastern State Hospital. The hospital is on a hilltop, a scattering of red brick, red-tile-roofed buildings, surrounded by new mown lawns and orange flowers baking in the Oklahoma sun.

I pulled up to the administration building, went in, and asked for Dr Norfleet. I spoke to him on the telephone there, and he told me he'd be available in a few minutes. Waiting, I became aware of how time slows down outside Oklahoma City!

Dr Norfleet, however, was on the move when he came in. I would have recognized him, even without the outstretched hand and the use

of my name. He was much as expected, a big man who looked well and moved well. He was clearly a no-nonsense man, a busy, energetic man. That, too, struck me as paradoxical, for there was no conflict between the feeling that he was forever on the move, and that he had all the time for me that we would need.

He was obviously pleased that the OSMA would recognize his work in this way (naming him a Leader in Medicine), and proud too, of a very recent resolution from the Oklahoma State Medical Association House of Delegates, commending him on his long years of service and his move to new duties in Vinita.

From what I learned both from Dr Norfleet and from his colleagues, no commendation was more deserved. Ed has been vice-president of the state medical association on two occasions, has been on the editorial board of the JOURNAL, has served as trustee some eighteen years, and has been on more boards and councils and commissions than is practical to mention.

He had just returned from the association's Annual Meeting. He told me he'd attended twenty-nine of these meetings.

I read the commendation, and it was apparent that the association was even prouder of what he had done to earn it than he was to receive it.

"I'll drive you around the place a little," Ed offered. We got in his car and he began to point out buildings and aspects of his work there. Most striking to me was a maximum security enclosure where, now and then, inmates from death row are kept for observation. "We are very careful not to wrong the mentally disturbed," Ed said. "With these, as with other patients sent us by law agencies, my role is treatment, after evaluation by Dr Garcia, another staff doctor."

At the top of the heavy wire fence that surrounded the maximum-security enclosure was rolled barbed wire, concertina, the kind we made and used as engineers in World War II.

Behind the barbed enclosure, cows grazed in an open field. "We're set in the middle of a farm," Ed said. He was aware of the contrast, as was I.

As we talked, I noted a solid affection for the hospital, and an unusual knowledge of its history, including tales too apocryphal and

earthy to include here.

Dr Norfleet spoke, too, of changes, of going from early conditions of perhaps three thousand patients and very few doctors to the present conditions of about three hundred patients and as many as thirty staff physicians. Advances in treatment, especially in new drugs, he says, are responsible for much of the change.

"Let's go out to the house," he suggested. "We can talk comfortably there. My wife's out of town, and we can have the house to ourselves."

From the hospital we drove to Dr Norfleet's spacious, comfortable new home. "Come in, come in," he urged, and then, "if my wife were here she'd say I shouldn't have you in with the house like this!"

The house is certainly fine — neat enough for anyone, but I'm married, too, and I knew what he meant. He looked at me out of those direct eyes, and he knew we had communicated. Dr Norfleet is an easy man to talk to! We settled on the sofa.

I asked about his roots, his childhood, wondering, as I do, how early in life a man makes the decisions and turns that let him emerge as an accomplisher, a leader in medicine for over thirty years.

He told me he was born in Des Arc, Arkansas. His mother was a school teacher, his father an early victim of diabetes. "We were poor, growing up," he commented, but there is nothing in his voice or in his eyes that suggests his success has been the result of some drive to overcompensate. He has four brothers, no sisters. The brothers, as he has, have grown up to be successful, responsible professionals and businessmen. He sounds quietly affectionate as he mentions them.

His eyes twinkled a bit as he spoke of school. "I graduated from college at nineteen. I had a pushy mama!"

"College" was Baylor University, where he earned BS and MS degrees in chemistry. He financed his undergraduate and medical degrees by working, and later, through the GI Bill, after he returned from service with the Third Army in Europe, he became eligible for schooling benefits. He's enthusiastic about the



In a sometimes bleak environment, Ed Norfleet radiates warmth and informality.

The maximum-security enclosure at Eastern State Hospital is a grim but necessary part of Ed Norfleet's surroundings.

GI Bill — and worries that this kind of thing may cease to be. The bill was a good two-way thing, he told me. It helped him through his medical training, and he has returned far more than he received in increased income taxes as a result of his medical education. He's convinced that the educational money from the government in the GI Bill helped many others, and was a good investment for the government as well, to say nothing of the social benefits of having a more highly educated public.

Earlier, to finance his undergraduate work, he did things like mow lawns. He smiled faintly as he said, "I mowed the president's lawn at Baylor." He grew more serious as he mused: "There's not a lot in that. There's only so many lawns to mow." And then in what appeared to be a digression, but really wasn't, "I always wanted to be a doctor!"

The military experience and the war years appear to have had another significant effect on his life. Like so many of his generation and mine, he found that World War II cut sharply across his youth, sucked him into the vortex of violence and strange experiences, and spit him out overseas for a time. Ed went into Europe shortly after D day, survived, as an enlisted man earned successive promotions to the rank of staff sergeant, then was commissioned. After the war, he was assigned to recruiting duty in Arkansas.

The duty was not bad, he told me, but the time came when the army said, "Either sign up and become regular army or get out." Ed chose to get out and further his education.

He ran for the state legislature on a CLEAN UP ARKANSAS platform, was elected, and served in the legislature for many years.

In talking to some of his friends about his legislative years, I learned some interesting things.

"Ed has one of the best built-in 'manure detectors' I have ever seen," one friend told me. "In the legislature, he had a reputation for cutting through cover-ups to get to what really was going on. He certainly wasn't a man you wanted to deceive. Besides that, he had little patience with stupidity and had the vocabulary to cut it off at the boot tops."



I could visualize that, too, as I talked with Ed. While he was in the legislature, he went to medical school at the University of Arkansas School of Medicine. He received his MD degree there and interned at Crawford W. Long Hospital at Emory University.

After that, he entered private practice in Sapulpa, where he became vice-president of Curry Hospital and Clinic. He served there for five years before moving to nearby Bristow, where he practiced for six years.

Of general practice Dr Norfleet says, "It was wearing. In the twelve years I practiced in the Sapulpa area, I delivered one thousand and thirty-eight babies. I thought there had to be something more suited to me than that kind of practice."

Thus he made the decision to continue training in psychiatry. He spent three years' residency at Central State Griffin Memorial Hospital, leaving there to begin private practice

There's a couch in Ed's office, naturally.
And he admits he uses it too . . .
for an occasional nap.

in psychiatry in Tulsa, where he practiced for seventeen years.

In recent years, a heart attack has slowed him down some, causing him to lose a hundred pounds and to look again at the stress of his workload. This led him to give up a more strenuous practice in Tulsa and accept his present position as senior staff psychiatrist at Eastern State Hospital.

His contribution to medicine and the medical profession has not been limited to his 33 years of practice and the already-mentioned services to OSMA. Some other contributions have been as president of the Creek County Medical Society and secretary and president of the Cleveland-McClain County Medical Society. He has been secretary and vice-chief of the Psychiatry Section at Hillcrest and secretary and chief of section of St John and St Francis hospitals in Tulsa. In Bristow, he served on the school board for five years. He has been active in developing such projects as the Methadone Treatment Program in Tulsa, where he served as advisor.

Dr Norfleet's mention of these things was very quiet and matter-of-fact. As we talked, I noticed a ceramic planter in the form of a pig, and was reminded of his schooling in Arkansas and the Razorbacks. I asked him about this.

"Yes," Ed answered. "I collect pigs. I have about three hundred of them."

I asked him what has been most meaningful to him in all these years of service and he told me it is his work with adolescent psychiatry. He has been medical director of Shadow Mountain Institute in Tulsa and was the first medical director of the adolescent program at St John Hospital.

"We're going to have an adolescent program here next year," he added, describing his role in suggesting the new program and helping to bring it about.

He told me of his experience looking for a common denominator among seriously disturbed young people.

"I found it, too," he said. He looked at me strangely, and I'm not sure, but I think I saw his eyes twinkle.

"Yes?" I prompted.

"They were all dropped on their heads when



very young," Ed quipped. He didn't smile, but he saw my skepticism.

"That's right," he continued, "whenever one of these young people gets in trouble with the law, the mother, usually, or some close relative, comes in to tell me how it all happened, and all of them were dropped on their heads, or had their heads crushed by forceps at birth, or something like that."

I thought about that, and about what Dr John Blaschke, another mutual friend, had said.

"One thing about Ed is his wit. He has one of the greatest, driest wits in the world. He really should have been a US senator. He'd have been distinguished there, as fine a success as he is as a doctor." John hadn't known of Ed Norfleet's years in the Arkansas legislature, and his success there.

"I'm not surprised," John commented.

Ed mentioned a few more things about the adolescent program.

I was reminded at this point of what a mutual friend, Dr Mark R. Johnson, had said

about Ed. "One of Ed's greatest assets is his ability to keep himself and his group guided on course — not diverted." They're going to have an adolescent program at Vinita — Ed will see to that!

We talked about the new drugs that help the mentally disturbed. First, Thorazine®, that did so much to empty mental hospitals, and then its derivatives and related drugs.

Ed grinned. "You know, today these salesmen come in and tell me their company has a new drug — maybe forty times stronger than Thorazine."

So I say: "But look, these pills made out of the new drug don't look any smaller."

And they say, "Well, we have to build them up to a convenient size with filler."

And then I ask, "If you've used less drug to get the same effect, and built it up with filler to the same size, of what use is the extra strength to me or to my patients? Funny thing, they don't seem to have thought about that."

As I listened, I thought, *Well, that built-in manure detector of his does work pretty well, as I was told. I'll bet he did cut stupidity off at the boot tops when he was in the Arkansas legislature.*

"Would you advise a young man to go into medicine today?" I asked.



"I surely would," he replied. "I know we have many, many doctors now, compared to what we used to have. But there are still so many fields, some of them fairly new, so many specialties that a young person can get involved in, that it promises a very fine career."

I asked him about escalating medical costs. He agreed that costs have multiplied greatly, but made me aware in a new way of exactly where and how that has happened. He began by reminding me that new techniques and new equipment, like that used for the latest brain scanning, have cost millions of dollars, and now provide benefits unheard of in earlier years. The quality of medicine, he said, has multiplied perhaps five times in recent years — and the new research and equipment costs have to be borne by the whole society that benefits, or there wouldn't be the money for research and new machines.

I was, of course, aware of that. But he went on to say that with the number of doctors now available, plus the insurance benefits, plus the government, plus good education, people are getting five times as much care as they used to.

I knew that, too, but I never put it together. If I'm getting, as a consumer, five times as much care, and it is five times as good, it shouldn't be surprising that it costs twenty-five times as much — five times five is twenty-five.

And I guess it really hasn't gone up that much. I'm still uneasy with medical bills being ten or fifteen times what they used to be, but perhaps we are really farther ahead than most patients realize.

Dr Norfleet speaks of his family with affection. He has two children by wife Eva Louise, deceased. His son, Edward K. Norfleet, Jr, is a graduate of the University of Oklahoma College of Law. A practicing attorney with Diamond Shamrock Corporation, he is married and has two children, Edward Keats Norfleet II and Emily Nell Norfleet.

Dr Norfleet's daughter, Polly Ann, attended the University of Oklahoma and is now in the real estate business in Tulsa.

Ed's second wife, Almeta Faye, is a nurse who is very active in Volunteer Nurses Group and in the Foster Care Program. She has been

Ed's growing collection of almost 300 pigs is a colorful reminder of his Arkansas Razorback heritage



appointed to Governor Nigh's State Foster Care Advisory Board, and has worked in various capacities in all the hospitals in Tulsa.

Dr Norfleet has one stepson, Bryan Farless, attending Jenks High School.

As we concluded the interview, I looked around the house thinking of Dr Norfleet's family, the comfortable home, the red brick hospital on the hill, and his continuing dedication to his profession, and I thought that if Oklahoma medicine is in the hands of leaders like Ed Norfleet, we're in pretty good shape!

Dr Val Thiessen retired recently after more than 30 years as a professor of literature and creative writing at Oklahoma City University. His writing, both fiction and nonfiction, has appeared in more than 40 different magazines.

J. Don Cook is a professional photographer currently on the staff of The Daily Oklahoman. His work, which has taken him abroad on numerous occasions, has earned him a reputation as one of Oklahoma's finest photojournalists.



News from the Oklahoma State Department of Health

Environmental health evaluation of the Tar Creek area

The site of one of the most productive lead/zinc mining operations in the United States has been evaluated by a multidisciplinary group of scientists to determine its potential health risks. Their conclusion: No significant health risks to area residents exist at this time.

Discovered in 1901, the mining district is located in Ottawa, Cherokee, and Jasper counties in Oklahoma, Kansas, and Missouri, respectively. Mining continued there until 1958, when all major operations were shut down.

Groundwater inflow during the mining period made necessary the use of large sump pumps to maintain unsaturated conditions. When the mines closed, gradual flooding occurred. The incoming water reacted with oxidized sulfide products to form acid mine water. The major impact of the acid mine water has been the continued deterioration in the quality of

some ground and surface waters in Ottawa County. This area is known as Tar Creek.

In response to this problem, Tar Creek was ranked as a priority site for federal Superfund money for clean-up. On the state level, Gov George Nigh appointed a task force to evaluate the area's possible impact on Grand Lake and the Roubidoux groundwater aquifer, both of which supply drinking water to a large segment of northeast Oklahoma citizens.

The Health Effects Subcommittee of the task force established "no action" levels to define those toxic metal concentrations at which no significant adverse health effects would be expected. Environmental levels of lead, cadmium, chromium, copper, and zinc were evaluated for toxicological significance.

Following an analysis of samples taken from Tar Creek and its tributaries and mine discharges, as well as samples from the Boone Aquifer, the committee concluded that contamination of mine water and ore-bearing aquifers had occurred, precluding their use as safe drinking water sources.

Analyses of existing water sources found them within the Health Effects Subcommittee's "no action" levels, and safe for drinking.

Fish samples were collected from the mouth of Tar Creek, the Grand (Neosho) River, Spring River, and Grand Lake, and analysis confirmed fish taken from these areas are safe to eat. No significant air or soil radiation was identified. □

DISEASE	June 1984	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	6	4	9
CAMPYLOBACTER INFECTIONS	40	96	71	—
ENCEPHALITIS, INFECTIOUS	4	10	11	11
GIARDIA INFECTIONS	22	90	86	—
GONORRHEA (Use ODH Form 228)	973	6102	7825	7111
HAEMOPHILUS INFLUENZAE				
INVASIVE DISEASE	14	103	76	—
HEPATITIS A	26	191	230	188
HEPATITIS B	28	158	148	104
HEPATITIS, NON-A NON-B	4	22	22	—
HEPATITIS UNSPECIFIED	5	49	95	95
MEASLES (RUBEOLA)				131
MENINGITIS, ASEPTIC	7	25	88	43
MENINGITIS, BACTERIAL				
(non-meningococcal, non H. Influenzae)	3	27	44	28
MENINGOCOCCAL INFECTIONS	1	23	23	20
PERTUSSIS	7	201	70	23
RABIES (Animal)	13	66	75	120
ROCKY MOUNTAIN				
SPOTTED FEVER	42	66	75	48
RUBELLA	0	0	0	2
SALMONELLA INFECTIONS	50	170	208	136
SHIGELLA INFECTIONS	29	83	84	101
SYPHILIS (Use ODH Form 228)	15	93	127	82
TETANUS	0	0	0	0
TUBERCULOSIS	29	122	126	157
TULAREMIA	5	6	12	9
TYPHOID FEVER	1	2	1	0

Diseases of Low Frequency	Total to Date This Year
ACQUIRED IMMUNE DEFICIENCY SYNDROME	
BRUCELLOSIS	2
LEGIONNAIRES DISEASE	12
MALARIA	4
REYE SYNDROME	14
TOXIC SHOCK SYNDROME	7
RABIES	
ADAIR	SKUNK 1
BECKHAM	SKUNK 2
DELAWARE	SKUNK 1
GARFIELD	BOBCAT 1
GRADY	SKUNK 3
LINCOLN	SKUNK 1
OTTAWA	COW 1
ROGER MILLS	SKUNK 1
STEPHENS	CAT 1
WASHITA	DOG 1

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OSMA fills two staff positions in August

Robert W. Baker III and Otie Ann Carr, both of Oklahoma City, became the newest members of the Oklahoma State Medical Association staff on August 1.

Baker, a graduate of the University of Oklahoma, has been named an associate director. He replaces Lyle R. Kelsey, who left the OSMA in April to join Allied Nursing Care, Inc., Oklahoma City.

Prior to assuming his new post, Baker was an administrative assistant to Oklahoma State Senator Roger A. Randle for two years.

The OSMA has contracted with Carr to implement special projects and assignments with the state legislature. A graduate of Southwestern Oklahoma State University, Weatherford, Carr is a former legislative consultant for Quan-

tum Research Group, Inc, in Oklahoma City. She has also been a member of the Oklahoma Health Systems Agency and manager of special programs for the University of Oklahoma Health Sciences Center. □

Arthritis research grants go to five OMRF doctors

In its continuing support of arthritis research, the Oklahoma Chapter of the Arthritis Foundation has awarded grants totaling \$27,500 to five researchers at the Oklahoma Medical Research Foundation (OMRF) in Oklahoma City.

Recipients of \$5,500 grants are John B. Harley, MD, affiliated professor, for developing new diagnostic tests for lupus; Ira N. Targoff, MD, associate investigator with the Veterans Administration, for developing new diagnostic tests for polymyositis; Roberta J. Jacobs, PhD, assistant member, for the study of immune complexes in patients with rheumatic diseases; Chiharu Kubo, MD, senior research associate, for research into the influence of dietary restriction on autoimmune disease; and Kunisuke Himeno, MD, senior research associate, for research into the transfer of arthritis-resistant genes in mice. □



Robert W. Baker III



Otie Ann Carr

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Annual state meeting of ACP-OSIM set for October

The annual joint Oklahoma regional meeting of the American College of Physicians (ACP) and the Oklahoma Society of Internal Medicine (OSIM) will be held at Shangri-La Lodge on Grand Lake near Afton, Oklahoma. Also participating in the October 25-28 meeting is the Oklahoma Chapter of the American College of Cardiology.

All Masters, Fellows, Members, and Associates of these organizations are invited to attend the meeting, which will feature both local and national speakers. Other interested physicians and their spouses, particularly residents and members of the armed services, are welcome.

Honored guests at the meeting will be Saul J. Farber, MD, MACP, president and official representative of the ACP; William R. Smith, MD, FACP, official representative of the American Society of Internal Medicine; Edward N. Brandt, Jr, MD, PhD, Assistant Secretary for Health, Washington, DC; James R. Snapper, MD, associate professor of medicine, Vanderbilt University School of Medicine, Nashville; and Charles R. Kleeman, MD, FACP, Factor Family Foundation, professor of nephrology and medicine and director of the Center for Health Enhancement, University of California School of Medicine, Los Angeles.

Presentations will include selected papers on cardiology, hematology/oncology, pulmonary diseases, infectious diseases, and water and metabolic disorders.

Among the social activities will be a cocktail party on Thursday evening, October 25, and a cocktail party and banquet on Friday evening,

October 26. Luncheons are scheduled for both Friday and Saturday, and a wine and cheese party is planned for Saturday afternoon. Golf and tennis tournaments have been scheduled for Friday and Saturday afternoons.

For information on registration and tickets, contact Kay Bickham, Executive Staff, 601 Northwest Expressway, Oklahoma City, Oklahoma 73118, (405) 843-9571 or 341-3169. □

Reliance on specialists sinking US medicine?

The most pressing health personnel problem in the United States is an oversupply of physician specialists, according to a researcher writing in the *Journal of the American Medical Association (JAMA)*.

The observation is based on a comparative study of the supply and specialty distribution of physicians in Belgium, West Germany, the Netherlands, the United Kingdom, and the United States. University of California, San Francisco, researcher Steven A. Schroeder, MD, compared the numbers of physicians per 10,000 population and found the United States in the middle of the five countries with 19.1 per 10,000.

Topping the list was Belgium with 24 physicians per 10,000 population, followed by West Germany, 22.9; the United States, 19.1; the Netherlands, 19.0; and the United Kingdom, 16.2. However, specialty distribution among the nations was markedly higher for the United States, with 84% designated specialists, com-



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AMA releases revision of terminology book

The American Medical Association (AMA) has released a new publication of Current Procedural Terminology Fourth Edition (CPT-4) — entitled *CPT 1984*. This book contains information on more than 6,000 medical, surgical, and diagnostic services, including listings for more than 750 new and revised entries. It is a comprehensive and current manual for describing, coding, and reporting medical procedures.

The descriptive terms and identifying codes that constitute *CPT-4* serve a wide variety of

functions in the field of medical nomenclature. *CPT-4* has been adopted for the reporting of physician procedures and services by a variety of government and private third-party payers, including most recently the federal government for Medicare and Medicaid.

CPT-4 is also useful for administrative management purposes such as claims processing and for the development of guidelines for medical care review.

Beginning with *CPT-1984*, which is available now, revisions to *CPT-4* will be released and published annually. Purchasers will receive notification during the year of important code changes if necessary and will also receive the end-of-the-year notice for reordering. Annual publications will be color-coded so users can easily identify the current volume.

CPT-1984 books sell for \$25.00 with a ten percent discount for AMA members. The handling charge per order is \$1.50 and the delivery charge is \$2.50 per book. Orders must be prepaid. They may be sent to the Order Department, Op 341, American Medical Association, PO Box 10946, Chicago, IL 60610.

CPT-4 is also available on magnetic computer tape and comes in two versions — one, a short description tape suitable for computer reporting and the other, a full procedure tape for more involved activities. □

Specialists (continued)

pared with only 24% for the United Kingdom and 62% for the Netherlands.

The numbers of physicians pose less a problem than this mix of physicians, Schroeder maintains. "Although the United States does not appear to have a high concentration of physicians, it may be the most vulnerable of the five countries to physician-associated increases in medical care costs," he says, pointing out that the US has developed a heavy reliance on specialists.

In addition to a high concentration of surgical specialists, the US has high concentrations of psychiatrists, neurologists, radiologists, cardiologists, and gastroenterologists. "It is unique in its heavy reliance on specialists in internal medicine, pediatrics, and gynecology to provide primary care rather than to serve as consultant physicians," Schroeder says.

He concludes that while the US may not have an oversupply of physicians, compared with European countries, it is suffering from an excess of specialists. "It seems reasonable to reduce the concentration of specialists in the United States to increase quality of care, reduce health care costs, and improve physician satisfaction," he says. □

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CPR guidance by telephone gets tryout in Washington

A bystander who knows cardiopulmonary resuscitation (CPR) can mean the difference between life and death for a heart attack victim. However, according to an article appearing in the *Annals of Emergency Medicine*, citizen training programs in CPR often target the wrong age group.

Annals is the monthly clinical journal published by the American College of Emergency Physicians (ACEP).

"The vast majority of cardiac arrest patients are men over age 40, and most cardiac arrests (70%) occur in the home," reports William B. Carter, PhD, associate professor, Department of Health Services, University of Washington, author of the study. "These findings suggest that women over age 40 are most

CPR guidance (continued)

likely to witness a cardiac arrest and, therefore, should be a primary target group for training. In contrast, the majority of individuals who voluntarily seek CPR training average age 33."

Carter suggests one way to reach the untrained citizen is to provide immediate instructions when a cardiac arrest is reported to an emergency dispatcher. Carter and his colleagues have developed and evaluated a program of CPR instruction that can be given over the telephone by emergency dispatchers to bystanders reporting a cardiac arrest.

"Our hypothesis — that a simple, short, safe, and effective CPR message can be delivered by telephone to willing but untrained citizens — was supported by our experiences," says Carter.

"Based on the results of this evaluation, we have instituted a countywide (King County, Washington) telephone CPR program," explains Carter. "Now when an untrained individual reports a cardiac arrest, he or she can provide emergency care instead of standing by helplessly." □

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Infant mortality dropping but SID reports increase

Overall postneonatal mortality (PNM) rates in the United States have declined dramatically in recent years, by almost half among black infants. However, reported rates of sudden infant death (SID) have increased drastically during the same period, making it the leading reported cause of death in infants aged four weeks to 12 months. These statistics from the Centers for Disease Control (CDC) in Atlanta are reported in a recent *Journal of the American Medical Association (JAMA)*.

Muin J. Khoury, MD, and colleagues studied National Center for Health Statistics birth and death certificate data for 1962 through 1978. They found that most of the decline in PNM can be accounted for by reduced mortality from infectious diseases, especially respiratory illnesses. Infant deaths attributed to birth defects and to injuries other than homicides also decreased. Many deaths are related to socioeconomic conditions and access to medical care, underscoring the importance of ready access to care, the researchers say.

The overall rate of PNM in the United States, although declining, is higher than levels reported in Scandinavian countries, the researchers note, and it appears related to the high reported incidence of SID. "Although in the 1960s SID accounted for a negligible proportion of postneonatal deaths, it emerged in the 1970s as the leading reported cause of PNM, accounting for about one third of all deaths in 1978," they say.

"On death certificates, however, SID may represent a diverse group of conditions, and its reporting has been subject to criticism in case definitions and ascertainment," the researchers point out. There is some question about whether infectious respiratory disease deaths reported earlier may actually have been SID. "It may well be that SID has always been an important, although unrecognized, cause of PNM."

With improvements in diagnostic and reporting methods, the researchers suggest, better estimates of the true incidence of SID will be obtained. □

NIH confirms estrogen, calcium fight osteoporosis

The mainstays of prevention and management of osteoporosis are estrogen and calcium, according to a National Institutes of Health consensus conference report published in the *Journal of the American Medical Association (JAMA)*. Exercise and nutrition may be important adjuncts, the report adds.

Between 15 million and 20 million people in the United States are affected by osteoporosis, and some 1.3 million fractures each year result from the condition, according to the report.

"Estrogen replacement therapy is highly effective for preventing osteoporosis in women," the report confirms. "Estrogen reduces bone resorption and retards or halts postmenopausal bone loss."

The report says that case-controlled studies show that women who begin estrogen replacement within a few years after menopause have far fewer hip and wrist fractures than women who do not begin replacement therapy. "Even when started as late as six years after menopause, estrogen prevents further loss of bone mass, but does not restore it to premenopausal levels."

Until more data on risks and benefits are available, physicians and patients may prefer to reserve estrogen (with or without progestogen) therapy for conditions that confer a high risk of osteoporosis, such as the occurrence of premature menopause," the report notes.

The report points out that most people do not take the recommended 800 mg of calcium a day, but typically take only 450 mg to 550 mg. Even the recommended 800 mg per day is too low for postmenopausal women, according to the report. "It seems likely that an increase in calcium intake to 1,000 to 1,500 mg per day beginning well before the menopause will reduce the incidence of osteoporosis." □

Election Year 1984

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Study finds no link between estrogen, breast cancer

Women who take noncontraceptive estrogens do not increase their risk of developing breast cancer, according to a study conducted by David W. Kaufman, ScD, of Boston University School of Medicine and colleagues.

The case-control study included 1,610 women with breast cancer and 1,606 women who were hospitalized with other conditions and had no history of cancer. Controls were chosen from the same decade of age as each case. Eighty percent of the cancer victims and 70% of the controls had never taken estrogens, but among those who did, the researchers found no evidence of increased risk of breast cancer. Their findings are reported in the *Journal of the American Medical Association (JAMA)*.

Commenting editorially, Barbara S. Hulka, MD, MPH, of the University of North Carolina at Chapel Hill, observes that studies reporting negative findings often receive scant attention, and she notes that one can never be 100% sure that there is no association between an exposure factor and a particular disease. She adds, "Clini-

cians and their patients are vitally interested in negative results, particularly when the exposure of interest is exogenous estrogen, a commonly prescribed replacement hormone, and the disease under study is the most common cancer among women."

Earlier, smaller scale studies did suggest an increased risk of breast cancer among women who took estrogen products, but Hulka notes, "In contrast with these findings, the study of Kaufman, et al, as well as three other large well-designed studies have shown no relationship between exogenous estrogen and breast cancer."

Hulka says that it is unlikely that any important biological effect exists that cannot be detected through these studies, and points out the benefits of estrogen therapy in treating menopausal symptoms and osteoporosis. □

Deaths

GRACE CLAUSE HASSLER, MD
1900 - 1984

OSMA Life Member Grace C. Hassler, MD, died in her home in Oklahoma City on July 14. Dr Hassler, an Enid native and an anesthesiologist for over 40 years, was a 1935 graduate of the University of Oklahoma School of Medicine. A diplomate of the American Society of Anesthesiology, Dr Hassler retired in 1982.

CARRYL W. WIGGINS, MD
1900 - 1984

Carryl William Wiggins, MD, associate clinical professor emeritus of the Department of Medicine, University of Oklahoma, died on July 17 in Oklahoma City. Dr Wiggins was born in DeWitt, Nebraska, and was graduated from the University of Nebraska School of Medicine in 1925. He practiced family medicine in Shickley, Neb, until his move to Canton, Okla, in 1937. He was awarded a Life Membership in the OSMA in 1976, and retired in 1979.

In Memoriam

1983

Hillard E. Denyer, MD	August 8
Edward A. Allgood, MD	August 18
Hugh E. Wilson III, MD	August 27
Harold J. Black, MD	September 1
Marque O. Nelson, MD	December 24
Park H. Medearis, MD	December 26
Charles S. Beaty, MD	December 28

1984

Jack H. Foertsch, MD	January 19
Thomas L. Ozment, MD	February 11
Thomas L. Foster, MD	February 25
Robert W. Lowrey, MD	February 27
Ella Mary George, MD	March 1
Kemper C. Lain, MD	March 8
William R. Cheatwood, MD	March 12
William A. Dean	March 19
Charles H. Cooke, MD	March 23
Donald J. Worden, MD	April 1
William I. Jones, MD	April 3
Paul Kernek, MD	May 9
Leon C. Freed, MD	June 12
William D. Bolene, MD	June 18
Lee K. Emenhiser, MD	June 26
Grace C. Hassler, MD	July 14
Carryl W. Wiggins, MD	July 17

Book Reviews

Recent Advances in Rheumatology. Part 1: Underlying Mechanisms of Disease. Part 2: Clinical Features and Treatment. Edited by W. Watson Buchanan and W. Carson Dick. New York: Churchill Livingstone, 1979. Part 1: 214 pages, \$24.50; Part 2: 218 pages, \$24.50.

In the preface of this two-volume text, the authors point out that within the last decade rheumatology has made important advances, and at least ten new diseases have been described. These advances over the last decade are in part from the contribution of pharmacologists, immunologists, and other basic scientists.

No attempt has been made to review the entire field of rheumatology. Instead, the focus has been directed to certain of the most significant advances. The editors have marshalled a prestigious group of contributors, particularly from the United Kingdom and the United States.

In *Underlying Mechanisms of Disease*, chapters are devoted to osteoarthritis, dermatomyositis, experimental evaluation of im-

**The editors
have marshalled a
prestigious group
of contributors.**

munosuppressive drugs in the context of connective tissue diseases, pathogenesis of autoimmune diseases, and the role of inflammatory mediators in joint inflammation.

Highlighting Part 2, which has an excellent selection of illustrations, the authors and editors discuss the recent advances in clinical features and treatment, primarily of rheumatoid disease. Chapters are devoted to drug evaluations including the latest nonsteroid anti-inflammatory agents, as well as those of earlier vintage. Two chapters describe the various surgical procedures available for joint disorders. Of particular importance is the final chapter, which concerns the relationship of the seronegative form of arthritis to the histocompatibility antigen HLA-B₂₇.

Both of these volumes are well organized

and written, although each contains several typographical errors. While basic research scientists might find the discussions rather simplified, those engaged primarily in clinical rheumatology will welcome this approach. Part 2 should prove especially rewarding to general physicians, orthopedic surgeons, and students.

Harris D. Riley, Jr, MD
Children's Memorial Hospital
University of Oklahoma Health Sciences Center
Oklahoma City, Oklahoma

Pediatric Haematology. By Michael L. N. Willoughby. New York: Churchill Livingstone, 1977. Pp 434, \$39.50.

Pediatric hematology as a specialty has been quite slow to develop in England. In that country, hematology has been under the aegis of pathologists and clinical pathologists and, in contrast to this country, relatively few clinicians have specialized in hematology. Among pathologists, few have limited their interests in work to the pediatric age group. This book represents the first from Great Britain dealing specifically with pediatric hematology, while in the United States there are at least a half a dozen textbooks on the subject. The author, Dr Willoughby, is consultant hematologist to the Royal Hospital for Sick Children and the Queen Mother's Hospital in Glasgow.

The book is well written and quite readable. It covers the various disorders that make hematology of children different from that of adults. Most of the discussions are brief, and practitioners will find the book helpful in diagnosis and treatment of children with hematologic disorders. The references are reasonably up to date.

The book is made up of twenty different sections, each being devoted to a broad topic in pediatric hematology such as "defects of platelet and capillary function," and "acquired hemolytic anemias." The introduction provides a brief but pertinent discussion of hematological assessment in children.

Perhaps the chief criticism of this book is the abbreviated treatment of iron deficiency anemia, the most common anemia of infants, children, and adolescents. Many of the sections,

Book Reviews (continued)

such as those which deal with folate metabolism, are substantially longer, although the conditions discussed are less common.

All in all, this is an interesting and worthwhile addition to one's library.

*Harris D. Riley, Jr, MD
Children's Memorial Hospital
University of Oklahoma Health Sciences Center
Oklahoma City, Oklahoma*

Bacteriology Illustrated. 4th Edition. By R. R. Gillies and T. C. Dodds. New York: Churchill-Livingstone, 1976. Pp 247, illustrated, \$16.00 (paper), \$26.00 (cloth).

The first edition of this illustrated primer in bacteriology was published in 1965. The atlas is divided into five sections, the first of which provides information on the morphology, physiology, and classification of bacteria. The second discusses essential features of most genera that are necessary for the isolation and identification of species. Most of the illustrations of colonies are of actual size. The third section reviews diagnostic procedures with illustrations. This section is perhaps the weakest in the manual. Sections 4 and 5 provide brief descriptions, illustrations, and photographs of protozoa and fungi. The drawings, illustrations, and color photographs in this, the fourth edition, continue to be superb. This atlas should prove useful not only to students of medicine and microbiology but to students in pharmacy, nursing, and other health related fields.

*Harris D. Riley, Jr, MD
Children's Memorial Hospital
University of Oklahoma Health Sciences Center
Oklahoma City, Oklahoma*

Respiratory Tract Mucus. Ciba Foundation Symposium 54 (New Series). Amsterdam: Elsevier - Excerpta Medica - North Holland, 1978. Pp 334, illustrated, \$33.50.

When the prevalence of chronic obstructive pulmonary disease, including bronchial asthma, chronic bronchitis, and cystic fibrosis, is considered, the interest in the biology of mucus of the respiratory tract is not surprising. Despite

the efforts of many investigators since the original work of Claude Bernard more than 100 years ago, there is very little known about the biology of mucus that can be confidently connected to disease.

The first part of the book covers the structure of mucus-secreting bodies and the mechanisms controlling mucus secretion in the respiratory tract and other sites. The next section deals with the physical and chemical properties of respiratory tract mucus and with mucociliary transport and clearance. The last three papers are on clinical aspects, including the use of animal models in studies of diseases of the respiratory tract in humans.

Of the fourteen papers in the proceedings, five deal with subjects directly applicable to clinical conditions: one deals with mucociliary clearance, one with criteria for evaluating changes in the mucus as a result of chronic bronchitis, and three with animal models having clinical disease. The paper by Sadoul and his co-workers provides an excellent introduction to the technical problems of viscoelastic measurement, and it stresses the importance of correlating this parameter with the presence of mucins, immunoglobulins, serum proteins, and leukocytes. The paper on nasal mucociliary clearance by Proctor and colleagues is somewhat disappointing because the factors that control normal clearance rates are not clarified. There are excellent papers on the structure and function of mucus. The remaining contributions are interesting from an experimental point of view, but their scope is restricted and their impact limited to a particular experimental design.

This interdisciplinary symposium summarizes available information on respiratory tract mucus and indicates the areas most readily open to further exploration. In many ways the discussions following each chapter provide the most interest because they present contrasting views and focus in depth on points of particular importance. The book certainly will be of interest to respiratory physiologists and biochemists, pathologists, and physicians concerned with the research in or treatment of respiratory illness, especially those associated with excessive production of mucus.

*Harris D. Riley, Jr, MD
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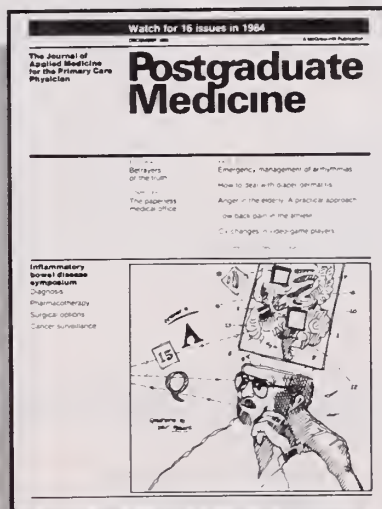
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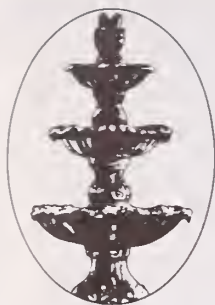
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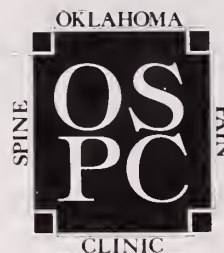
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NEWS

Members of the Oklahoma State Medical Association, the constituent societies of the association, and all readers in general are invited to supply news items of general interest to the profession.

ADVERTISING

All advertising copy must be approved by the Editorial Board before acceptance for publication. General and miscellaneous advertising rates will be sent on request.

EDITING SERVICE

The Editorial Board reserves the prerogative to submit contributions to a Medical Editing Service when warranted. If such is felt necessary, the Editor will contact the author for approval, informing him that there will be a modest charge for this service.

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Authors will receive reprint order forms from the Transcript Press, PO Drawer 1058, Norman, Oklahoma 73070, prior to final publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

BACK ISSUES

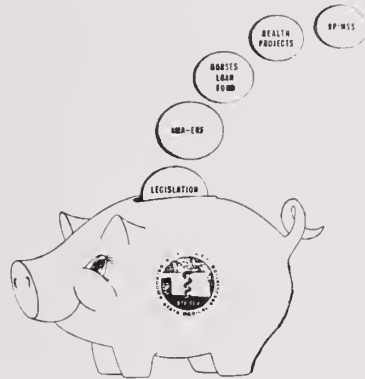
Microfilm copies of back issues of *The Journal* may now be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

Invest in the future — through membership

September is the time of year that state and county auxiliaries begin gearing up for another year of activities. The summer months of planning are finally put into action. Among these many activities is, of course, the annual membership drive. As we begin our year let us all remember the 5 Rs of membership:

1. **RENEW** the present membership.
Remember those who have helped so much in the past, and let them know that we appreciate and value their work. An interested member will continue to be a member. Remember that they are our best ambassadors.
2. **RECRUIT** the new member.
New arrivals need us as much as we need them. They've joined the auxiliary because they're interested. Give them a job. Tell them they're wanted. Encourage them to become involved.
3. **REFRESH** the nonmember.
Tell them about the benefits of belonging and how much they can help. Make a list of potential members. Send them a letter or give them a call. Let them know we need them.
4. **REACTIVATE** the drop-out member.
Let them know they've been missed. Ask them to join and lend their talents to the organization.
5. **REACH OUT** to the resident physician and medical student spouse groups. Contact them, talk to them. They are our future.

Another area of membership is the member-at-large. These are members who live



in communities where there is no organized medical auxiliary. Members-at-large are important to our organization too, for they are important resources in their communities for health related information.

People join organizations for many reasons. They believe in the organization and its objectives. They appreciate contacts and companionship. They join because their friends belong. They can obtain educational advantages. They want to be of service to others. They want to exercise leadership talents. Use these reasons to promote membership in medical auxiliary. Tell prospective members that as members of medical auxiliary we have a voice in one of the most constructively involved health organizations in our communities. Protecting and improving public health and assisting physicians in providing quality medical care are our primary objectives.

The future beckons us, and for the generations ahead, we must maintain a legacy. The success of our endeavors, as well as that of future undertakings, can only be assured through dedicated membership.

Pam

Pam Oster, President

■ **State physicians are reminded** that the DRG Monitoring Project, launched recently by the American Medical Association (AMA), needs their input. The project is trying to obtain a short-term, broad-based assessment of problems and/or improvements encountered by individual MDs since the implementation of the new PPS. Written comments should be directed to: AMA DRG Monitoring Project, Department of Health Care Resources, PO Box 10947, Chicago, Illinois 60610. Supportive documentation, if available, should be included.

■ **A physician's decision regarding the Medicare Participating Physician or Supplier Agreement** must be an informed one. Physicians who haven't already done so should petition Aetna Medicare for their pattern of charges for Medicare beneficiaries during the second quarter of 1984 (April-June).

Careful reading of section 3, "Term and Termination of Agreement," should alert the physician to the potential permanency of a decision to become a participating physician. The agreement "shall be renewed automatically" each October 1 unless either "the participant notifies in writing every Medicare carrier with whom the participant has filed . . . that the participant wishes to terminate the agreement at the end of the current term" or HCFA determines "that the participant has substantially failed to comply with the agreement."

■ **Courts should appoint expert witnesses** to offer medical testimony in disputes instead of relying on an adversarial parade of "experts," suggests George D. Lundberg, MD, editor of the *Journal of the American Medical Association (JAMA)*. "The use of impartial experts who may perform court-ordered examinations and report directly to the court has been endorsed by both the bar and medical associations," he says in *JAMA*. "Information developed in this manner would be available to the court and to both sides equally before and during trial."

■ **Have you registered to vote** in the November 6 general election? The deadline for voter registration in Oklahoma is October 26.

■ **In March of 1984, the Department of Human Services** faced a budget crunch that endangered the Vendor Drug Program through which Medicare and Medicaid recipients of department services receive three prescriptions per month. The total bill for 1983-84 was \$15,000,000.00. At the request of DHS, a joint committee of the Oklahoma State Medical Association, Oklahoma State Osteopathic Association, and Oklahoma State Pharmaceutical Association was formed to review the program and to make recommendations to the Medical Advisory Committee of the DHS. It was obvious that there were only four alternatives: continue as is and let the program die for lack of funds, reduce the prescription entitlement to two per month, eliminate certain categories of drugs, or reduce the cost of certain drug groups by allowing generic substitution. On June 7, 1984 the committee recommended to the DHS that generic drugs be used where possible and that the committee continue its study to recommend a maximum allowable cost for multiple source drugs. The DHS accepted these recommendations on June 14.

On August 12, the OSMA Board of Trustees approved this action and endorsed the committee's request that work continue to establish a maximum allowable cost where possible and that the OSMA membership be notified of the problem and the plan of action.

The joint committee will continue to work to reduce prescription costs so that our patients can receive the same services as before despite rising costs of medications. Further reports will be made to the membership.

Members of the committee are James Funnell, MD, chairman; Jerry Vanatta, MD; Tom Whitsett, MD; E. W. Young, Jr, MD; Henry Harnish, DO; and pharmacists J. C. Cobb, John Donner, John Lassiter, Ed McFall, and Willie Osborn. Rick Ernest, OSMA Associate Director, has provided invaluable staff support.

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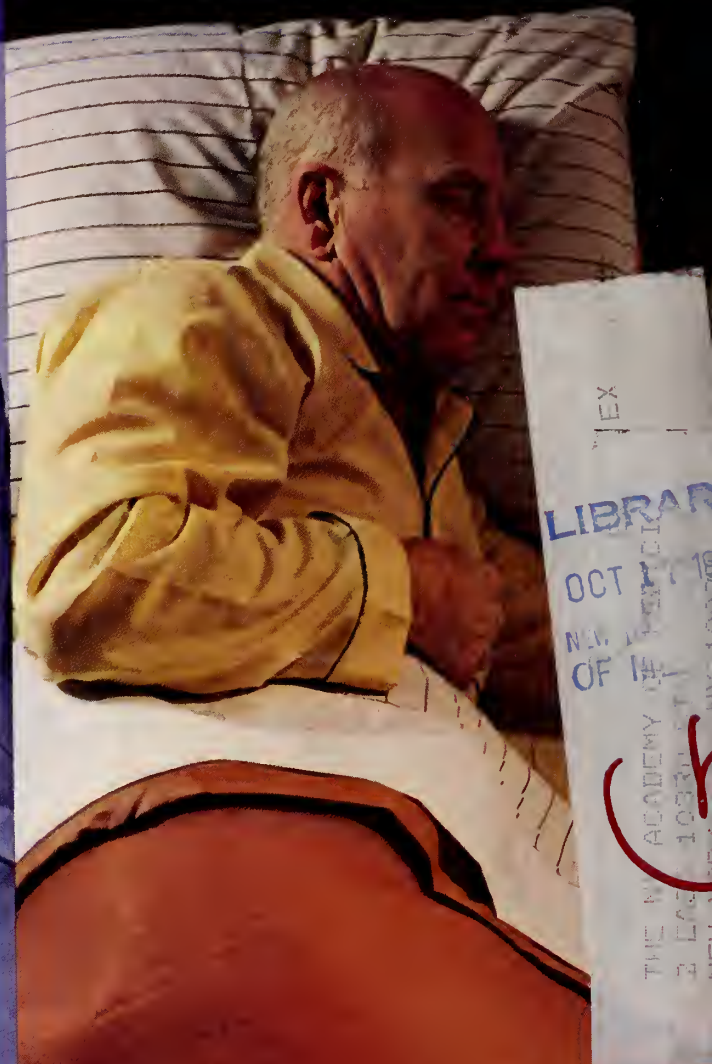
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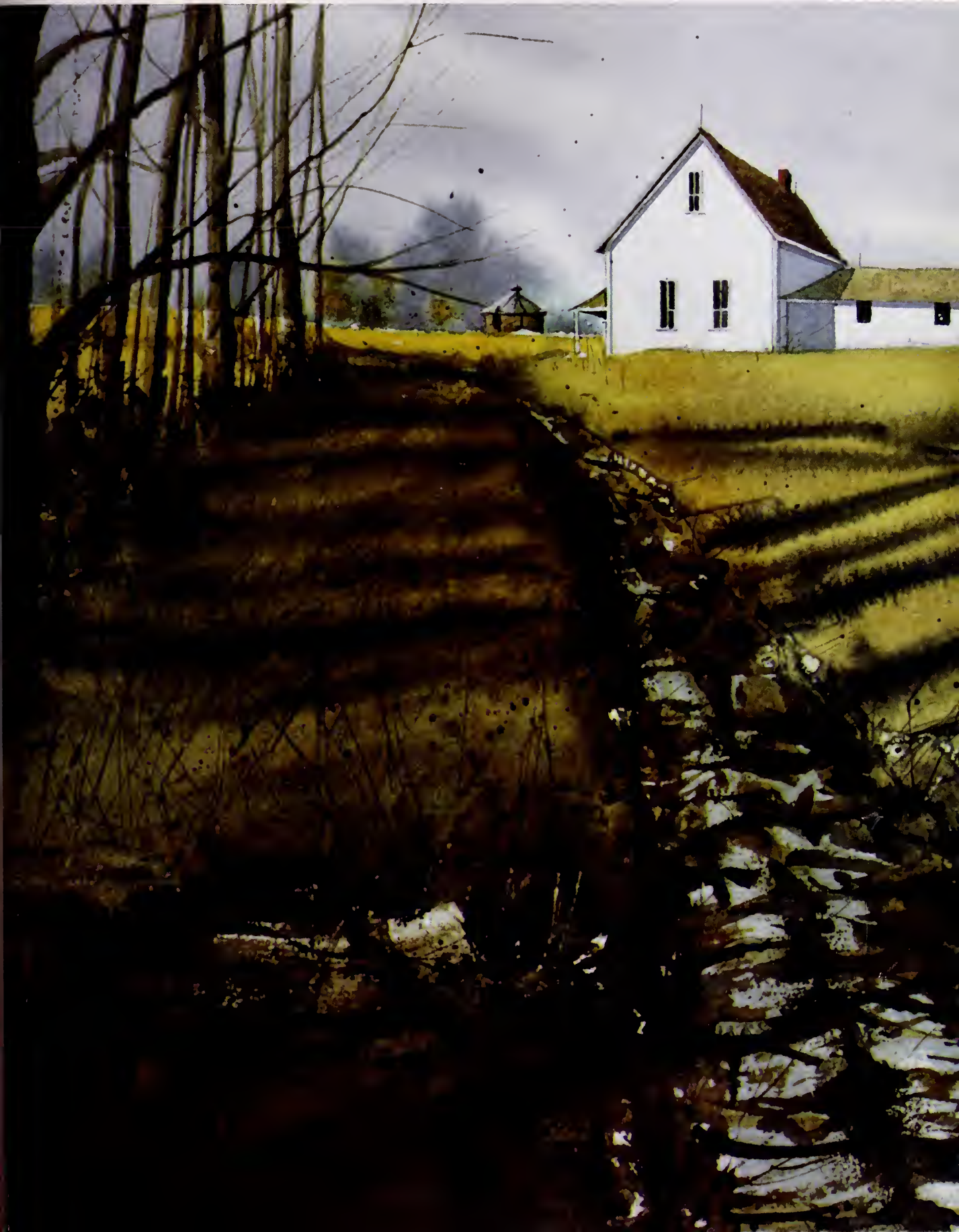


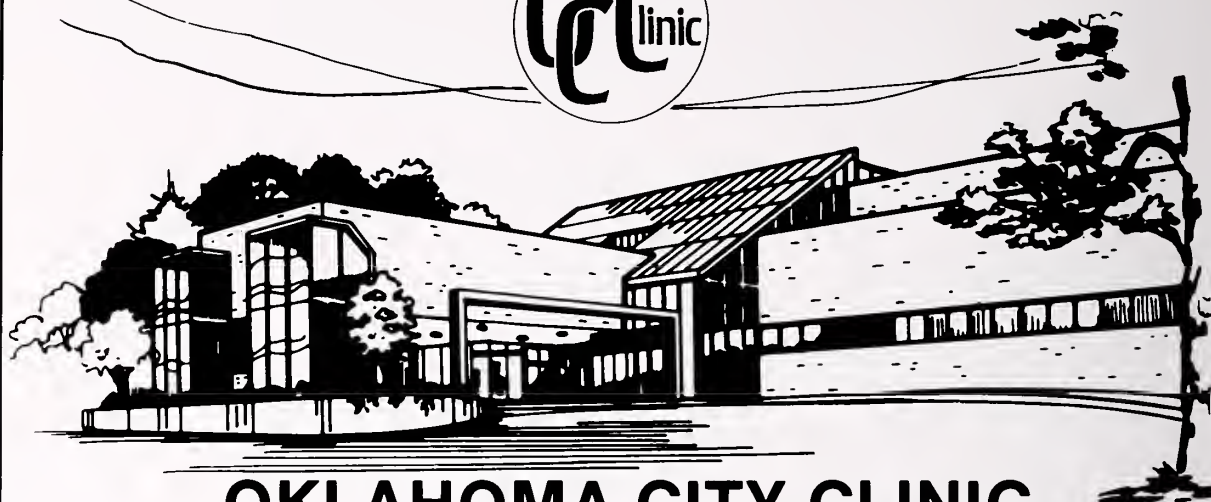
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Volume 77 — Number 10 — October 1984

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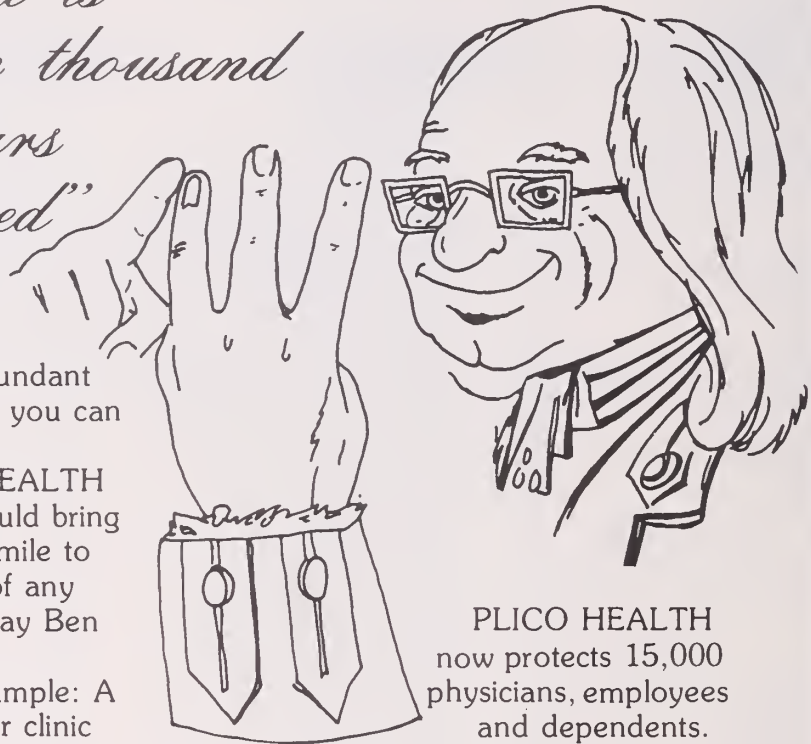
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JOURNAL

Oklahoma State Medical Association

OCTOBER 1984

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On the cover:

Detail from "Road Home" by
Brent Johnson, Oklahoma City
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Oklahoma City

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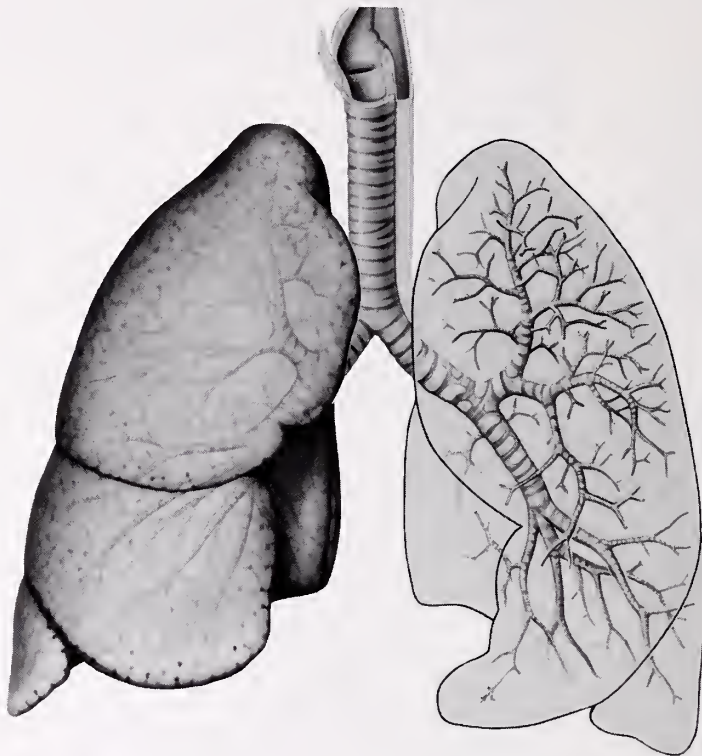
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The Journal of the Oklahoma State Medical Association (USPS 285-000)

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Brief Summary Consult the package literature for prescribing information

Indications and Usage: Cecilor® (cefactor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae* (*Diplococcus pneumoniae*), *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Cecilor.

Contraindication: Cecilor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Cecilor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, manage-

ment should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions*—If an allergic reaction to Cecilor® (cefactor, Lilly) occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Cecilor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures, when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Cecilor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Cecilor, a false positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinistest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy—Pregnancy Category B—Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum

human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Cecilor® (cefactor, Lilly). There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers—Small amounts of Cecilor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.16, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Cecilor is administered to a nursing woman.

Usage in Children—Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Cecilor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70). Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100), Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthritis, and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Cecilor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the symptoms.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy. Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

(061782R)

Note: Cecilor® (cefactor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

Eli Lilly Industries, Inc., Carolina, Puerto Rico 00630

Before prescribing, see complete prescribing information in SK&F CO. literature or PDR. The following is a brief summary.

WARNING

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function.

Thiazides may add to or potentiate the action of other antihypertensive drugs.

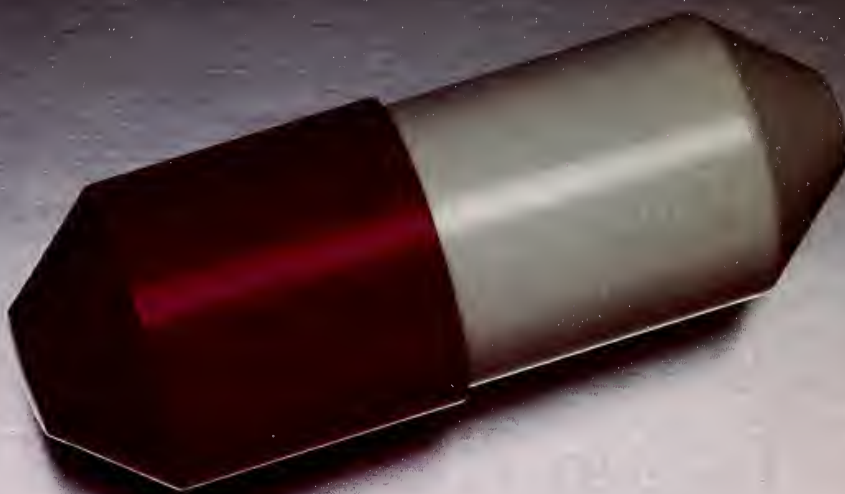
Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth, anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

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Panacea Proposition

No physician should ever be paid for doing something to a patient. Not one cent. Ever. Physicians should be paid for the time they spend caring for their patients. Nothing more.

If, tomorrow morning, these tenets became the basis of all physician reimbursement, irrespective of sources and irrespective of the kinds of services rendered, most of the malignant trends currently apparent in health care policies and the medical profession itself would, within the ensuing year, vanish. The costs of health and medical care would plummet. The malpractice crisis would dissipate. Liability insurance costs would decline. Inappropriate hospital utilization would decrease. Misadventures in diagnostic and therapeutic processes would become infrequent. Patients would become not just better informed but actually well informed — even knowledgeable about their diseases, their treatments, and their physicians. The numbers of subspecialty physicians would fall, and the numbers of primary care physicians would rise. The spectre of a technocracy in medical care would vanish. Medicine would regain its stature as a profession. Physicians would regain the respect, friendship, and love of their patients.

If these assertions strike you as airy headed, foolishly utopian, or thoroughly moronic, you don't understand or haven't thought about these fundamental truths: Physicians will do what they get paid for doing. If they get paid for the time they spend caring for patients, they will spend time with patients. If they do not get paid for the time they spend with patients but get paid relatively enormous, sometimes obscene fees for some procedure they carry out on their patients, they will carry out procedures on their patients. So long as the financial rewards remain the exclusive domain of the procedure doers, long-suffering undergraduate and postgraduate medical students

will be seduced by the irresistible desire to enter subspecialty training programs in which they might learn to do a variety of high stakes procedures.

It is not surprising that, since all these ills have a common cause, their common remedy becomes a true panacea. The common remedy? Stop rewarding physicians for doing procedures. Reward them only for the time they spend caring for their patients; talking to patients and their loved ones; eliciting a detailed history; doing a meticulous, painstaking physical examination; becoming knowledgeable about their patients' life-styles, their fears, their worries, their dreams, their disappointments, their achievements. Reward physicians for the time they spend keeping accurate and complete records; for talking with patients on the telephone; for traveling to and from houses, hospitals, and nursing homes; for writing prescriptions; for completing claims and reports; for attending patients during diagnostic studies; for being there.

To develop an equitable and appropriate schedule of reimbursement for physicians' time is remarkably simple. The formula is based upon a few easily identified characteristics: the number of years the physician spent in related postgraduate study; his or her actual overhead expenses as approved for tax purposes; and his or her liability risk category. Using these data, reimbursement indices for time spent with and/or devoted to the care of patients can be established. Total fees and payments will then assume realistic and understandable, justifiable and assailable proportions.

Surely this proposition deserves as much evaluation as the ill-conceived and apparently ineffective DRG reimbursement plan. This proposition addresses more than our financial ills. It may actually *be* the panacea for our composite syndrome of pathological processes.

And we'd better find one, quickly. We are already in a preterminal state.

—MRJ

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[Handwritten signature] Seidger III, M.D.

Surgery in the Obese Patient

Review of Complications Secondary to Obesity

JOHN C. KEY, MD
STEPHEN R. NEWMARK, MD

Surgery in the obese patient may be associated with both technical and metabolic complications that could be prevented or ameliorated by preoperative weight loss.

Obesity is a significant contributing factor in morbidity among both medical and surgical patients. The association between obesity and hypertension, diabetes, cholelithiasis, musculoskeletal problems, pulmonary complications, and thromboembolic disorders has been extensively documented in the literature.^{1-3,25} In spite of the knowledge of the increased risks of obesity, there has been little success in the development of successful treatment modalities or in the reduction of obesity-related morbidity.

The obese patient who requires surgical treatment presents a difficult management problem. Too familiar is the patient who is admonished preoperatively to reduce thirty pounds and who later returns for the operative procedure ten pounds heavier. Such patients subject themselves to significantly elevated risks, for they are twice as likely to develop wound infections or dehiscence than the nonobese subject,⁴⁻⁶ and four to six times more

likely to have thromboembolic complications.⁷ The increased incidence of pulmonary complications, both minor and severe, is even more widespread.⁷⁻⁸ Overall mortality is greater by 30% to 50% in the obese patient.^{3,7} A prolonged post-operative course may be anticipated.

Obesity has been implicated as an initial cause or complicating factor in many medical, surgical, and orthopedic problems. Complications of obesity in surgical patients have been documented in several specific areas.

Diagnosis

The diagnosis and demonstration of mass lesions is made more difficult by obesity. Normally palpable lesions are rendered obscure or imperceptible by a large abdominal panniculus, pendulous breasts, or fat deposits overlying node-bearing areas.⁹ Similarly, radiologic techniques may also be compromised by an excess of overlying fat-density tissue. Critical delays in diagnosis may be produced by this "masking" effect.

Thromboembolic Phenomena

The obese patient is at increased risk for the development of venous thromboembolism.¹⁰ The increased size and musculoskeletal instability

of an extremely obese patient, accentuated by postoperative pain, tend to cause decreased mobility and increased stasis. Strauss and Wise have pointed out the lack of controlled prospective studies in this area,³ but other reports are available which document a 4% to 6% incidence of thromboembolic complications in obese patients, compared to a much smaller incidence in their nonobese counterparts.^{7,11}

Pulmonary Insufficiency

Anesthetic problems and pulmonary complications are often serious in the postoperative obese patient, ranging from mild atelectasis and secretion retention to pneumonia and massive ventilation perfusion abnormalities.^{7,8,12} There is a decrease in tidal volume (TV), vital capacity (VC), and expiratory reserve (ERV) with a concomitant increase in respiratory rate in obese subjects.¹³ The work of breathing is increased due to a decrease in chest wall compliance; hence, increased ventilator pressure is needed to fill the lungs, resulting in cardiac compression.¹⁴ In turn, higher central venous pressures are then required to produce adequate ventricular filling. The mechanical complications produced by obesity are more obvious to the patient in a more basic fashion: a large panniculus exerts strain on a tender wound, intensifying postoperative pain and splinting. This decrease in ventilatory activity allows fluid to accumulate in dependent lung regions.¹⁴ Several studies have demonstrated a low ERV in obese patients with a closure of small (less than 2 mm) airways in dependent lung zones.^{12,15} A large anatomic shunt can then be shown.¹⁶ Hypoxemia without hypercapnia is the usual result, probably secondary to circulating overperfusion of underventilated segments.¹⁶

Soderberg and associates studied pulmonary function in obese patients both before and one year after weight reduction from jejunoileal bypass.¹³ Prior to weight loss, low VC with impaired lung function, shunting, and hypoxemia were found. After an average weight loss of 39 kg, spirometric values were improved with a decrease in respiratory rate and an increase in vital capacity.

Cardiovascular Effects

While the effect of obesity alone on coronary artery disease remains controversial, its role as

an etiologic factor in hypertension is well known.¹⁷ Obese hypertensive patients have been shown to have a greater mortality rate than either group alone.¹⁸ In a recent work, Reisin and coworkers have shown that weight loss alone can bring mild to moderate hypertension into normotensive ranges regardless of the patient's salt intake.¹⁹ Patients who are still hypertensive after weight reduction can be controlled with much smaller doses of antihypertensive medications than they were using before weight loss.

Alexander demonstrated a 100% incidence of cardiomegaly and increased cardiac output in fifty obese patients. He suggested that obesity is essentially a chronic high output state that can eventually lead to cardiac failure. These changes are reversible by weight reduction.

Wound Problems

Wound disruption is always feared, but that fear is greater and more justified in the obese patient.⁶ The mechanical strain caused by increased weight requires meticulous care in wound closure and often prompts the use of larger, more unwieldy suture materials.

Retraction, exposure, knot tying — in fact, all technical maneuvers — are more difficult in the obese patient, increasing tissue trauma and operating time. Any decrease in adipose tissue mass prior to operation is beneficial from a technical point of view.

It is not surprising that an increased incidence of wound disruption is seen in obese patients. Printen and associates demonstrate a significantly increased rate of dehiscence in obese subjects when compared to nonobese subjects.²¹ Similarly, several reports regarding incisional hernia have demonstrated higher incidence rates among obese patients, although no recent studies are available.³

Disruption of surgical wounds in obese subjects is often related to infection.⁶ The increased incidence of infection in the obese subject is well documented in several series, with clean wound infection rates ranging from 6.9% to 18.2%.^{22,23} The increased infection rate is probably caused by poor oxygenation of the healing tissue or a decrease in polymorphonuclear bacteriacidal capacity.²⁴ Alexander showed a decrease in circulating blood volume and blood flow per unit weight in about 30% of the obese patients. Blood flow in adipose tissue is decreased relative to flow rate in lean mass.²⁵

Metabolic Complications

A wide range of metabolic abnormalities are associated with obesity and can affect the surgical patient. Obese subjects have been shown to have abnormally high serum levels of glucose, amino acids, insulin, and triglycerides with reduced levels of high density lipoproteins.²⁶ Marks found diabetes mellitus to be the most common cause of death in obese patients.²⁷ The increased adipose tissue stores cause a reduction in insulin receptor sites and affinity with resultant insulin resistance. A decrease in insulin dosage or oral hypoglycemic agents after weight reduction has been documented by several authors.²⁶

Conclusions

Obesity in surgical patients causes a significant increase in the risk of venous thromboembolism, pulmonary and cardiovascular complications, metabolic abnormalities, and wound management difficulties. Weight reduction causes improvement or reversal of these risk factors. An aggressive program of weight reduction before elective surgery is indicated, utilizing appropriate dietary management that will not deplete total body protein, fluid, or electrolyte levels, thus maintaining the patient in optimal biochemical balance prior to surgery.

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Rational Use of Antibiotics

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The unrelenting barrage of new antibiotics and aggressive marketing, compounded by the pressures of DRGs, challenges today's clinician. Concentrating on efficacy and cost, this article is aimed at the rational use of antibiotics.

The antibiotic industry has mushroomed, accounting for 1.7 billion dollars in sales by manufacturers in 1982. This potential for wealth has generated enormous pressure from the pharmaceutical companies to market their products. As a consequence, the clinician has been bombarded with the advent of approximately 15 new antibiotics since 1978. Many of these antibiotics are similar in spectrum, making the choice of a particular agent difficult. In

addition, the new Orwellian DRG program has made our poor decisions easily.

The purpose of this paper is to serve as an update and *practical* guide to the rational use of antibiotics. It will *not* be encyclopedic. It will concentrate on antibiotic efficacy and cost, comparing the different agents within a group (for example the third generation cephalosporins) and comparing the different groups (for example cephalosporins versus penicillins). Side effects will also be addressed, although in general antibiotics are remarkably innocuous drugs.

Antibiotics will be categorized by the organisms they inhibit or kill, discussing in turn gram-negative bacilli, gram-positive cocci, and anaerobes. Each category will be subdivided into classes of antibiotics. For example, penicillins, cephalosporins, aminoglycosides, and trimethoprim/sulfamethoxazole will be discussed individually under the heading of gram-negative infections. Finally, a few guidelines will be mentioned on the popular questions of "antibiotic prophylaxis" and "empiric antibiotic selection." Comments will be limited to the parenteral products.

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I. TREATMENT OF GRAM-NEGATIVE BACILLI

Antibiotic pressure from the popular use of older antibiotics and the creation and growth of intensive care units, burn centers, and other bacterial breeding grounds have combined to select gram-negative bacilli as the "Andromeda

strains" of the 1970s and the 1980s. Recognizing this problem, science and industry have joined together to create the new penicillins and cephalosporins.

A. New Penicillins

Table 1. Efficacy of the New Penicillins

Generic Name	Enterobacteriaceae	<i>Pseudomonas aeruginosa</i>	<i>Staphylococcus aureus</i>	Enterococci	Anaerobes
Azlocillin Carbenicillin Mezlocillin Piperacillin Ticarcillin*	EXCELLENT ¹	GOOD ²	NONE ³	VERY GOOD ³	GOOD ⁴

*Routinely tested at Presbyterian Hospital.

Footnotes to Table 1

1. Compared to carbenicillin and ticarcillin, the newer agents (azlocillin, mezlocillin, and piperacillin) generally have lower MICs to the Enterobacteriaceae, but this has unclear clinical relevance. The newer agents have an increased spectrum, additional coverage including

Serratia and *Klebsiella*. However, a cephalosporin is the drug of choice for these organisms.

2. When treating *P. aeruginosa*, these agents should be used with an aminoglycoside. Azlocillin and piperacillin have the lowest MICs.
3. Azlocillin, mezlocillin, and piperacillin have low MICs to enterococci. Carbenicillin and ticarcillin are decidedly less active. Ampicillin is both clinically effective and cost-effective and should remain a drug of choice for enterococci.
4. The new penicillins are ineffective, in vitro, for approximately 5% to 20% of *B. fragilis*, the most commonly isolated anaerobe, especially in intra-abdominal infections. Accordingly, the use of one of these agents for anaerobic infections may not be optimal.

Table 2. Major Side Effects of the New Penicillins

Penicillin allergy Hypokalemia Hemorrhage Sodium load
--

Table 3. Comparative Sodium Load and Relative Costs of the New Penicillins

Generic Name	Brand Name	mEq Na/gm	Comparable Dose per Day	Acquisition Cost to Pharmacy per Day*
Azlocillin	Azlin®	2	18 gms	\$73
Carbenicillin	Geopen®	5-6	30 gms	\$28
Mezlocillin	Mezlin®	2	18 gms	\$58
Piperacillin	Pipracil®	2	18 gms	\$61
Ticarcillin	Ticar®	5-6	18 gms	\$43

*Each administration of drug generates an additional cost of approximately \$10 for equipment and labor.

Conclusions. Although the newer penicillins (azlocillin, mezlocillin, and piperacillin) have increased in vitro activity, there is no clinical evidence that they are superior to carbenicillin or ticarcillin for susceptible organisms. For certain resistant organisms such as *P. aeruginosa*,

the typically lower MICs to azlocillin and piperacillin may offer a clinical advantage.

The clear differences are cost and sodium load. We believe drug selection should include these considerations.

B. Cephalosporins

Table 4. Efficacy of the Cephalosporins

Generic Name	Entero-bacteriaceae	Pseudomonas aeruginosa	Staphylococcus aureus	Enterococci	Anaerobes
1st Generation* Cefazolin Cephalothin† Cephapirin Cephradine	Good ¹	None	Very Good ¹	None	Fair
2nd Generation* Cefamandole† Cefoxitin† Cefuroxime†	Better ¹	None	Good, except cefoxitin = poor ³	None	Fair, except cefoxitin = good ¹
3rd Generation* Cefoperazone Cefotaxime† Ceftizoxime Moxalactam	Best ¹	Cefoperazone = occasionally effective ²	Fair-poor ³	None	Occasionally effective ¹

* These drugs are commonly referred to as 1st, 2nd and 3rd generation based on their activity versus gram-negative bacilli. At the time of this publication, there are four 3rd generation cephalosporins marketed, with approximately nine more in various stages of development.
† Routinely tested at Presbyterian Hospital.

Footnotes to Table 4

- For a given isolate, the MICs to the Enterobacteriaceae are markedly lower for the higher generation cephalosporins. For example, a common *E coli* could have an MIC of 1 ug/ml to a first generation, 0.1 ug/ml to a second generation, and 0.05 ug/ml to a third generation cephalosporin.

- If an organism is susceptible to a first generation drug, and the drug is known to reach therapeutic levels in the involved tissues, this drug is adequate. Using a second and third generation cephalosporin when a first is adequate is not cost-effective.

- Many clinical situations call for the empiric use of potent gram-negative coverage before culture and sensitivity information is available. An example would be a nursing home patient who has been taking an oral cephalosporin and is admitted to the hospital with urosepsis: the infecting pathogen is likely to be resistant to the first generation cephalosporins. Another example would be a critically ill patient who has been hospitalized for several days and has been receiving antibiotics. In both cases, colonization by resistant flora selected by antibiotic pressure often necessitates the empiric use of a potent gram-negative antibiotic. While an aminoglycoside would likely be effective, the use of a third generation cephalosporin or broad-spectrum penicillin would also be effective in most cases.

Concerning cost, it becomes very important to monitor the cultures and change to a more cost-effective antibiotic if the susceptibilities permit. For example, if an isolate turns out to be an *E coli* susceptible to a first generation drug, switching to this drug could save the hospital as much as \$500 over a one-week period! A communication network should be set up between the clinician, microbiology lab, pharmacy, and DRG-conscious administrators to accomplish this goal.

A problem with this system arises when an expensive drug is begun empirically and all culture data are negative. If the patient has improved, there is

usually no rational basis for changing antibiotics. This is a common and costly occurrence for which there is no reasonable alternative.

- Some of the new cephalosporins, such as cefoperazone (and ceftazidime, not yet available), are remarkably active in vitro against *P aeruginosa*. Whether these agents, used alone, are acceptable substitutes for the classic aminoglycoside/antipseudomonal penicillin combination is not yet established. Resistance often emerges when a single agent is used. For the time being, the combination of an aminoglycoside with an antipseudomonal penicillin remains the gold standard of therapy for serious *P aeruginosa* infections.
- The first generation cephalosporins are generally comparable to the penicillinase-resistant penicillins in their efficacy against *S aureus*. The usual MIC is 0.25-1.0 ug/ml.

Cefamandole and cefuroxime have slightly higher MICs to *S aureus*, with MICs as high as 8 ug/ml reported. These two agents combine adequate coverage of gram-positive cocci and broad-spectrum gram-negative coverage, making them effective against a wide range of organisms. However, they are not optimal coverage for any particular organism and are grossly overprescribed.

Cefoxitin is unique among the second generation cephalosporins in that it is less effective for *S aureus*. Its major attribute is efficacy against anaerobes. Likewise, the third generation cephalosporins are markedly less effective than the first generation against *S aureus*.

- Cefoxitin and moxalactam are distinguished by particular activity against anaerobes. However, approximately 5% to 20% of *B fragilis*, the most common anaerobic pathogen, will be resistant. Their role as single agents for intra-abdominal infection, when compared to the classic combination of clindamycin or metronidazole, plus an aminoglycoside, is not yet definitely established.

Table 5. Major Side Effects of the New Cephalosporins

Cross allergenicity with penicillin¹
Bleeding²

Footnotes to Table 5

1. In patients who have had anaphylactic reactions to penicillins, cephalosporins should be used with great caution.
2. All broad-spectrum antibiotics have the potential to cause bleeding by eradicating vitamin K-producing bacteria. Some agents, such as moxalactam, are associated

with an increased frequency of bleeding and may involve other mechanisms in addition to vitamin K depletion. It is recommended that vitamin K be given weekly to patients receiving moxalactam, and this practice could reasonably be justified when giving any broad-spectrum antibiotic for prolonged periods of time.

Table 6. Comparable Costs of the Cephalosporins

Generation	Generic Name	Brand Name	Representative Dose and Interval		Acquisition Cost to Pharmacy per Gram*
			Dose	Interval	
First	Cefazolin	Ancel Kefzol®	1-2 gm	6-8 h	\$ 2.82
	Cephalothin	Keflin®	1-2 gm	4-6 h	\$ 2.23
	Cephapirin	Cefadyl®	1-2 gm	4-6 h	\$ 3.04
	Cephadrine	Velosfl®	1-2 gm	4-6 h	\$ 2.38
Second	Cefamandole	Mandol®	1-2 gm	4-6 h	\$ 5.60
	Cefoxitin	Mefoxin®	1-2 gm	4-6 h	\$ 7.01
	Cefuroxime	Zinacfl®	0.75-1.5 gm	6-8 h	\$ 5.03
Third	Cefoperazone	Cefobid®	1-2 gm	8-12 h	\$ 9.28
	Cefotaxime	Claforan®	1-2 gm	6- 8 h	\$ 9.22
	Ceftizixime	Cefizox®	1-2 gm	8-12 h	\$ 9.76
	Moxalactam	Moxam®	1-2 gm	8-12 h	\$10.45

* Each administration of drug generates an additional cost of approximately \$10 for equipment and labor. Accordingly, drugs with long half-lives requiring less frequent administration may be more cost-effective when compared to drugs that require more frequent dosing. Dosage varies depending on severity of infection.

Conclusions. There are many cephalosporins now available. The rationale for their development has been to cover the emergence of resistant gram-negative bacilli. These agents are markedly more expensive than their older counterparts. **The average cost per gram of the first generation cephalosporins is \$2.62; sec-**

ond generation, \$5.88; and third generation, \$9.68. As a rule of thumb, the least expensive effective agent should be used. The newer, more expensive agents should be reserved for situations where resistant organisms are isolated or suspected.

C. Aminoglycosides

There are four aminoglycosides commonly prescribed. The major difference is cost (see Table 7). Differences in spectrum of activity¹ and toxicity² are generally minor.

1. The spectrum of activity of the aminoglycosides is comparable, with the following qualifications:
 - a. Gentamicin is more effective for *Serratia* species.
 - b. Tobramycin is more effective for *P. aeruginosa*.
 - c. Amikacin is more effective for *Providencia* species.
 - d. When an organism is resistant to gen-

tamicin and tobramycin, it may remain susceptible to amikacin. The use of amikacin should be reserved for such resistant organisms.

- e. The aminoglycosides often act synergistically with the penicillins and cephalosporins and are therefore frequently used in combination therapy.
2. All four agents are potentially *nephrotoxic* and *ototoxic*. There is considerable controversy regarding subtle advantages of one agent over the other regarding relative toxicities. For example, tobramycin has been successfully marketed as being less neph-

Table 7. Comparable Costs of Aminoglycosides

Generic Name	Brand Name	Representative Dose and Interval		Acquisition Cost to Pharmacy per Dose*
		Dose	Interval	
Amikacin	Amikin®	500 mg	8-12 h	\$15.59
Gentamicin	Garamycin®	80 mg	8 h	\$.36
Netilmicin	Netromycin®	150 mg	8-12 h	\$ 4.57
Tobramycin	Nebcin®	80 mg	8 h	\$ 4.90

* Each administration of drug generates an additional cost of approximately \$10 for equipment and labor. Accordingly, drugs with long half-lives requiring less frequent administration may be more cost-effective when compared to drugs that require more frequent dosing. Dosage varies depending on severity of infection.

rotoxic than gentamicin. Attempts are being made to market netilmicin as the least toxic of the aminoglycosides. From a clinical point of view, however, the differences are of questionable significance. Serial creatinine and blood levels must be checked and doses adjusted accordingly, whatever agent is used.

Penicillins in high doses, such as the broad-spectrum penicillins often prescribed in conjunction with aminoglycosides, will inactivate the latter in vitro. This inactivation may lead to results which do not accurately reflect the patient's true aminoglycoside serum level. This interaction is time- and temperature-dependent. It would therefore

be wise to have the laboratory freeze-store a specimen which contains both an aminoglycoside and penicillin if it cannot be run within four hours.

Conclusions. Because of the marked cost differential, gentamicin should be the aminoglycoside used most frequently. When particular activity is sought for *P aeruginosa*, the increased cost of tobramycin seems warranted. Amikacin should be reserved for gentamicin/tobramycin-resistant organisms. When an aminoglycoside is used, serial creatinine and antibiotic blood levels should be checked and doses adjusted accordingly.

Table 8. New Penicillins vs New Cephalosporins vs Trimethoprim/Sulfamethoxazole: Efficacy, Toxicity, and Cost

	New Penicillins	New Cephalosporins	Trimethoprim/Sulfamethoxazole
Efficacy			
Gram-negative bacilli	Excellent, except		
Enterobacteriaceae	Klebsiella	Excellent	Excellent
Pseudomonas aeruginosa	Effective (use with tobramycin)	Some effective, ³ check MICs	Ineffective
Gram-positive cocci			
Staphylococcus aureus	Ineffective	Fair	
Enterococci	Excellent	Ineffective	Ineffective
Anaerobes	Acceptable ¹	Acceptable ²	Ineffective
Toxicity	Minimal	Minimal	Minimal
Pharmacy Acquisition Cost per Day	\$65 ^{4,7}	\$120 ^{5,7}	\$40 ^{6,7}

Footnotes to Table 8

1. See Table 1, footnote 4.
2. See Table 4, footnote 4.
3. See Table 4, footnote 2.
4. Average of the costs for azlocillin, mezlocillin, and piperacillin (see also Table 3).

5. Average of the costs for the third generation cephalosporins based on the maximum recommended dose per day. Lower doses are often adequate.
6. Cost of intravenous trimethoprim/sulfamethoxazole based on 8 ampules per day.
7. Recall that the average cost for the first generation cephalosporins is less than \$10 per day.

D. Trimethoprim/Sulfamethoxazole (Bactrim®, Septra®)

The efficacy of trimethoprim/sulfamethoxazole against gram-negative bacilli has been somewhat overshadowed by the new penicillins and cephalosporins. It offers a unique mechanism of action such that penicillin- and cephalosporin-resistant organisms may remain susceptible to this agent. In addition, this agent can be used for gram-negative infections in patients severely allergic to penicillins and cephalosporins. It is now available in an IV preparation

and is also very well absorbed orally. Its cost compares favorably to the new penicillins and cephalosporins (see Table 8). Allergic reactions to sulfa are a potential problem, occurring in approximately 3% of patients. Finally, note that although trimethoprim/sulfamethoxazole is effective against many gram-negative bacilli, it is ineffective for *P aeruginosa* and anaerobes and has limited indication for gram-positive cocci.

II. TREATMENT OF GRAM-POSITIVE COCCI

Once antibiotics became available, we began seeing the development of resistant organisms. For example, whereas *S aureus* was initially susceptible to penicillin G, most clinical isolates are now resistant to this agent. We are presently in an era of resistant gram-negative bacillus infections such that the development of most new antibiotics, namely the broad-spectrum penicillins and higher generation cephalosporins, are directed towards treating these organisms. It is important to recognize

that these antibiotics have not been developed for coverage of gram-positive organisms and are relatively deficient in this area. Interestingly, the gram-positive cocci appear to be making a comeback in the form of increased numbers of *S epidermidis* and enterococcal infections and methicillin-resistant *S aureus*. Indeed, the omnipotent gram-negative bacillus antibiotics are probably fostering the return of gram-positive cocci.

Table 9. Treatment of *Staphylococcus aureus*

Generic Name	Brand Name	Representative Dose and Interval		Acquisition Cost to Pharmacy per Representative Dose*
		Dose	Interval	
Penicillins ¹				
Nafcillin ²	Nafcil®/Unipen®	2 gm	4-6 h	\$ 2.79
Oxacillin ²	Prostaphlin®	2 gm	4-6 h	\$ 4.13
Cephalosporins ²	see Table 6	see Table 6	see Table 6	see Table 6
Vancomycin ³	Vancocin®	0.5 gm	6 h	\$17.53
Clindamycin ⁴	Cleocin®	0.6 gm	6-8 h	\$11.39

* Each administration of drug generates an additional cost of approximately \$10 for equipment and labor. Accordingly, drugs with long half-lives requiring less frequent administration may be more cost-effective when compared to drugs that require more frequent dosing. Dosage varies depending on severity of infection.

Footnotes to Table 9

1. Methicillin is the original penicillinase-resistant penicillin but is not generally used today because of its increased potential to cause nephrotoxicity.
2. The penicillinase-resistant penicillins (nafcillin and oxacillin) and the first generation cephalosporins (see Tables 4 and 6) are drugs of choice for these infections. In certain parts of the country, methicillin-resistant *S aureus* has become prevalent, accounting for up to 50% of the *S aureus* isolates. These isolates are resistant to all penicillins and cephalosporins.
3. Vancomycin is the only reliable drug for methicillin-resistant *S aureus*. Vancomycin is also the drug to be used for *S aureus* in penicillin- and cephalosporin-allergic patients. Although this drug has previously been associated with significant nephro- and ototoxicity, the newer, more purified vancomycin preparations are less toxic.
4. Clindamycin is unique in that it is an ideal drug for anaerobes and is also quite effective against *S aureus* and other gram-positive cocci (except enterococci).

Table 10. Treatment of *Staphylococcus epidermidis*

1. Penicillins or cephalosporins, if susceptible; otherwise
2. Vancomycin, gentamicin, and rifampin (in combination)

Table 11. Treatment of Enterococci

Penicillin + Streptomycin or Gentamicin
 Ampicillin + - Streptomycin or Gentamicin
 Vancomycin + - Streptomycin or Gentamicin

Although often a contaminant, *S epidermidis* is also the most common organism to infect prosthetic devices such as heart valves and CNS shunts. It is also appearing with increased frequency in association with vascular access devices. Its treatment is difficult, with a variable percentage of strains resistant to penicillins and cephalosporins. Some combination of

vancomycin, gentamicin, and rifampin has been shown to be the treatment of choice for this organism when penicillin or cephalosporin resistance has been demonstrated (Table 10).

The enterococci are composed of several species of group D streptococci, the main pathogen being *S faecalis* which is especially difficult to treat. As opposed to other streptococci, this organism is particularly resistant to several antibiotics. It requires penicillin plus streptomycin or gentamicin, ampicillin (or some of the newer penicillins), or vancomycin for successful therapy. However, for serious enterococcal infections, streptomycin or gentamicin should always be included. Tobramycin is probably less effective. The cephalosporins are not effective for enterococci and may even select out this pathogen, resulting in superinfection (Table 11).

III. TREATMENT OF ANAEROBES

Table 12. Treatment of Anaerobes

Generic Name	Brand Name	Representative Dose and Interval		Acquisition Cost to Pharmacy per Representative Dose*
		Dose	Interval	
Clindamycin	Cleocin®	0.6 gm	6-8 h	\$11.39
Metronidazole ¹	Flagyl®	0.5 gm	6 h	\$ 3.75
Chloramphenicol ²	Chloromycetin®	1 gm	6 h	\$ 1.34
Penicillin G ³	Various	2-4 mil U	4-6 h	\$ 1.40
New penicillins ³	Various	see Table 3	4-6 h	see Table 3
Cefoxitin ³	Mefoxin®	2 gm	4-6 h	\$14.02
Moxalactam ³	Moxam®	2 gm	8-12 h	\$20.90

* Each administration of drug generates an additional cost of approximately \$10 for equipment and labor. Accordingly, drugs with long half-lives requiring less frequent administration may be more cost-effective when compared to drugs that require more frequent dosing. Dosage varies depending on severity of infection.

Footnotes to Table 12

1. Clindamycin and metronidazole are the most effective anaerobic agents. Clindamycin offers additional coverage for gram-positive cocci, including *S aureus*, but excluding enterococci. For infections caused by anaerobes alone, metronidazole is more cost-effective than clindamycin. The spectrum of metronidazole is limited to anaerobes (and some parasites).
2. Chloramphenicol is very effective for most anaerobes but is not generally used because of its potential to cause aplastic anemia.
3. Penicillin G and the newer penicillins (see Table 1) and some of the newer cephalosporins (cefoxitin and moxalactam) are effective against 80% to 95% of anaerobes. However, these agents will not effectively cover many strains of *B fragilis*, the most common anaerobic pathogen. Therefore, their use in anaerobic infections instead of clindamycin or metronidazole must be questioned.

IV. ANTIBIOTIC PROPHYLAXIS

Antibiotics have been shown to be effective prophylaxis in many surgical procedures. They are frequently employed for this purpose, accounting for a high percentage of antibiotics

used at most hospitals. Prophylactic antibiotics should be given within 2 hours before incision and for no more than 24 to 48 hours after surgery. Deviations from this schedule are in-

appropriate in terms of efficacy, side effects, and cost. For example, continuing an antibiotic beyond 48 hours postoperatively, for a clean procedure, does not decrease the rate of infection, but does increase the risks for drug toxicity and clearly escalates unnecessary costs.

The choice of antibiotic for prophylaxis is somewhat arbitrary. The agent should cover

those organisms most frequently associated with the particular procedure in question. Since wound infections are most frequently caused by *S aureus*, the gram-negative penicillins and third generation cephalosporins are not rational choices. Rather, a first generation cephalosporin (or perhaps a second generation cephalosporin) should be used.

V. EMPIRIC USE OF ANTIBIOTICS

The bottom-line question is: What antibiotic or antibiotics should be used for an ill patient when cultures are either negative or pending? There is, of course, no one correct answer. The decision-making process should involve the following:

1. Decide the most likely organism(s) involved in a particular type of infection. For example, an intra-abdominal infection is usually

caused by enteric gram-negative bacilli and anaerobes.

2. Check regarding antibiotic allergies.
3. Select a regimen that is organism-specific and cost-effective.
4. Tailor the regimen when culture and sensitivity information becomes available.
5. Monitor for toxicity and superinfections (resistant organisms), and modify the regimen accordingly.

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Control of Intra-Abdominal Hemorrhage

A Comparison of Methods

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A percutaneously insertable balloon catheter which can occlude the aorta has been developed. In controlling abdominal hemorrhage and shock, this catheter appears to be more effective than the MAST garment and less invasive than thoracotomy with cross clamping.

Control of hemorrhage is a demanding, but potentially rewarding problem in the management of trauma. Current standard therapy for the initial management of hemorrhagic shock consists of intravenous fluid replacement and inflation of MAS-Trousers. Recent research has suggested that MAST garments may not be totally effective for the control of massive intra-abdominal hemorrhage. Our preliminary studies on animals have shown that occluding

the aorta with a balloon is significantly more effective in controlling massive intra-abdominal hemorrhage.

Introduction

The 1984 "standard of care" for the early management of intra-abdominal hemorrhage includes supplemental oxygen, splinting, compression dressing, and intravenous fluid replacement, usually with lactated ringers solution. MAS-Trousers (Military Anti-Shock Trousers, also called PAST—pneumatic anti-shock trousers) have also been recommended by many; some traumatologists believe that MAS-Trousers "will effectively stop bleeding in the abdomen and lower extremities, obviously not in the chest."¹ Cross clamping of the aorta, or similar maneuvers have been used intraoperatively to control severe intra-abdominal hemorrhage.

There are multiple previous reports of inflating intra-aortic balloons to control hemorrhage, but these devices all required either a cut-down onto a peripheral artery or insertion into the lesion during surgery.²⁻¹⁶ Recently, Low and Cram reported the experimental use of percutaneously inserted balloon catheter to control intra-abdominal arterial bleeding.¹⁷ We now re-

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port a pilot study of a specially designed, percutaneously placed balloon catheter to control intra-abdominal hemorrhage from blunt trauma in anesthetized dogs (Fig 1).

Materials and Methods

Eleven dogs weighing 20 to 28 kg were anesthetized with 30 mg/kg IV pentobarbital, intubated, and placed on a constant volume Harvard ventilator, and arterial and venous cannulas were placed. Arterial blood gases were controlled with standard measures. The abdomen was opened and, while the splenic artery was temporarily occluded, the entire spleen was traumatized. The spleen was then returned to the abdomen, the abdominal wall was tightly closed, and the dog then received one of three treatments: (1) control animals were supported with IV fluids only; (2) MAST-treated animals were supported with IV fluids and inflation of pediatric MAS-Trousers tailored to snugly fit around a dog; and (3) balloon-treated animals were treated with IV fluids and inflation of an intra-aortic balloon. The balloon is a percutaneously insertable Datascope occluding aortic balloon; the occluding balloon is shorter and wider than an intra-aortic pumping balloon. The occluding balloons were inflated with saline

until the balloon could be felt to tightly occlude the aorta just above the celiac artery, where the aorta penetrates the diaphragm.

Treatment continued for a maximum of four hours. Dogs surviving this long were then euthanized with an intravenous injection of potassium chloride. Blood gases and hematocrit were checked throughout the experiment. Following death the animals were autopsied and the amount of blood in the abdomen was measured.

Because this was pilot study, the experiment was not balanced or randomized. Statistical analysis consisted of one-way analysis of variance (done on a Hewlett-Packard HP 41-CV calculator with a STAT PAC module). Between-treatment comparisons were done by Newman-Keul's test using a harmonic mean. Rate of blood loss measurements were log transformed to correct for non-normal distribution. The small number of animals involved precludes the use of a more elaborate statistical model.

Results

Rate of blood loss differed significantly between the groups. In four control (IV only) dogs the mean rate was 46 cc/minute. The \pm log transformed standard deviation gave a range of 25-85 cc/minute. Three MAS-Trouser dogs bled at

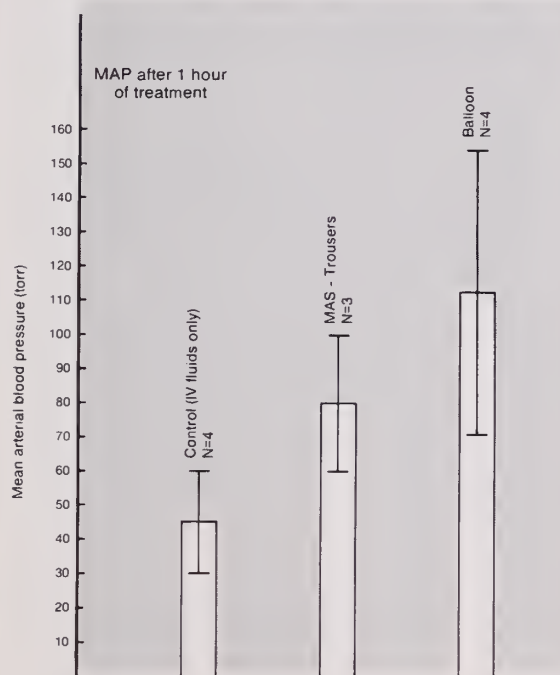


Fig 1. Mean arterial blood pressure \pm standard deviation in torr (mmHg) after one hour of treatment with IV fluids, MAS-Trousers, or balloon occlusion of the aorta.

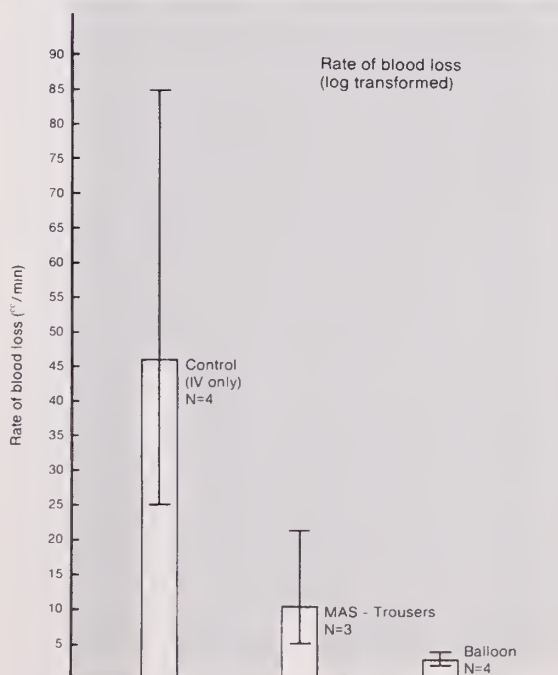


Fig 2. Rate of blood loss \pm log transformed standard deviation in cc/min.

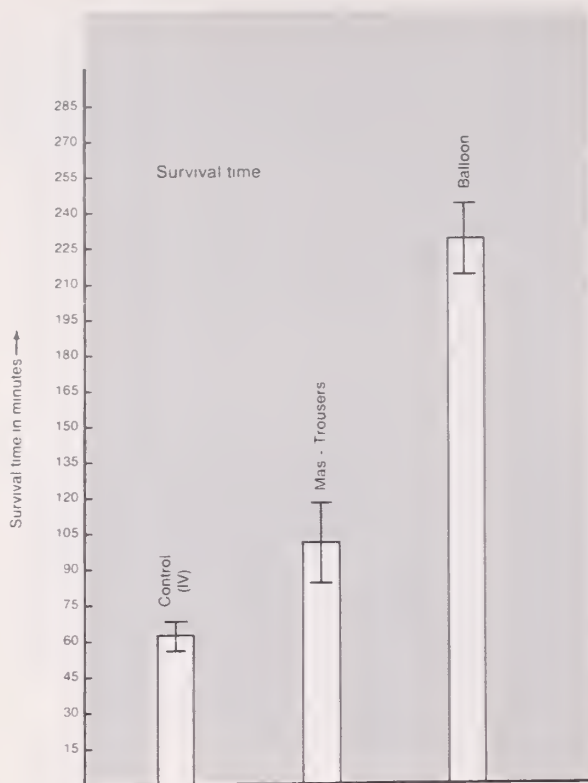


Fig 3. Survival time \pm standard deviation in minutes for animals treated with IV fluid resuscitation, MAS-Trousers, or balloon occlusion of the aorta. (Dogs were sacrificed if they survived four hours.)

10.5 (4.9-22.4) cc/minute, and the four balloon-treated animals bled at 2.4 (1.8-3.4) cc-minute. Overall $F=6.31$, $P < .01$. Both devices lowered blood loss from control values ($P < .01$ for both) and the occluding balloon worked better than MAS-Trousers ($P < .01$) (Fig 2).

Statistically significant differences were also found for survival times. After injury, control dogs lived 62 ± 5 minutes standard deviation. MAS-Trousers-treated animals lived for 100 ± 17 minutes, and balloon-treated dogs for 232 ± 15 minutes. Three of the four balloon-treated dogs survived four hours; the other balloon-treated dog died after 210 minutes. Overall, $F=70.6$, $P < .01$. MAS-Trousers improved survival time over control (IV) therapy ($P < .01$); balloon inflation also improved survival time over control ($P < .01$); and the balloon was more effective than MAS-Trousers ($P < .01$) (Fig 3).

As expected, there were no statistically significant differences between the baseline measurements of mean arterial blood pressure (MAP) before the spleen was traumatized or treatment begun, $F = .68$, $P > .05$.

Blood pressure after one hour of treatment did show statistically significant differences. Control animals treated with IV fluid resuscitation had a mean arterial pressure (MAP) of only $45 \text{ torr} \pm 15 \text{ torr}$. The dogs treated with MAS-Trousers had MAP's of $80 \pm \text{torr}$, and the animals treated with balloon inflation had MAP's of $113 \pm 42 \text{ torr}$. Overall $F=5.43$, $P < .05$. Balloon treatment was significantly better than control ($p < .05$). The other treatment comparisons did not show statistically significant differences (Fig 4).

Placing the balloon just above the diaphragm was verified by post mortem examination. There were no cases of balloon rupture and no cases of grossly evident injury to the aorta. There was minimal thrombus formation on the balloon, even though no anticoagulation therapy was used.

Discussion

"Few problems in Medicine are as dramatic in presentation, as demanding in management, or as gratifying in successful resolution as acute hemorrhagic shock."¹⁸ The body's natural tendency to compensate for hemorrhagic shock includes a leftward shifting of the oxy-hemoglobin dissociation curve, absorbing interstitial fluid into the intravascular space, tachycardia, increased stroke volume, constricting of post capillary vessels and large veins (the capacitance system), and selective arteriolar constriction to shunt blood from "nonessential" organs to the heart and brain.

Early therapeutic intervention includes supplemental oxygen, splinting, compression dressing, and intravenous fluid replacement. MAS-Trousers have been advocated because: (1) Initially they were believed to have an "autotransfusion" effect¹⁹⁻²¹ representing shift of blood volume from the lower body to the upper body (Recently, several well designed experiments²²⁻²⁸ have shown that this effect is negligible); (2) it is thought that inflation of the trousers compress the vascular bed underlying them, thus shunting blood flow to the upper half of the body.²⁶⁻³⁰

Emergency cross clamping of the aorta has also been recommended to control massive abdominal hemorrhage and redirect blood to the heart and brain. Recently, a semiflexible aortic compressor has been developed; this compressor allows the operator to occlude the aorta without dissecting the aorta free and applying a clamp.³¹ Both the clamping and the compressor



Fig 4. Precluder™ occluding intra-aortic balloon with J wire inserted.

techniques require a thoracotomy and will compromise pulmonary function.

This preliminary study suggests that both MAS-Trousers and the occluding aortic balloon may help stabilize the blunt abdominal trauma patient. Our results are consistent with previous work which has shown that a major hemodynamic effect of the trouser is to shunt blood which is already in the circulation to the upper body, thus, supporting perfusion of the brain and heart. Both devices supported blood pressure, although this improvement was statistically significant only with balloon treatment. This study provides the first experimental evidence that MAS-Trousers tamponade intra-abdominal hemorrhage. This tamponade seems partial — the spleen bleeds, but at a reduced rate. Our results suggest that the balloon treatment will reduce the rate of hemorrhage by a factor of four compared to MAS-Trouser treatment, although the small number of dogs tested in this pilot study means that our conclusions should be taken tentatively.

Serious complications of MAS-Trousers use are unusual.³² Compression injuries and compartment syndromes have been noted.³²⁻³⁴ Respiratory compromise with MAS-Trousers' use is usually mild,³⁵⁻³⁷ but can be severe in pa-

tients with spinal cord injuries.³⁸ Renal function is impaired,^{28,39} although usually this impairment has no long term significance.³²

Complications of balloon occlusion have not been thoroughly studied. Balloon inflation is no more damaging to the aorta than the best vascular clamps.¹⁶ Dogs have been shown to tolerate balloon occlusion at the level of the diaphragm for about 60 minutes before developing permanent renal and/or spinal cord damage. The dogs tolerated the occlusion for only 30 minutes if they were in shock prior to balloon inflation.² Human trauma patients have tolerated intermittent aortic cross clamping for 75 minutes without post operative sequelae.⁴⁰ An occluding aortic balloon was used intermittently in a dog for 24 hours without complication.⁴¹

Intra-aortic balloon pump catheters are associated with the following complications: local wound problems (especially with cut-downs), hemorrhage (especially if the femoral or iliac artery is injured), and thrombo-embolic complications. Serious complications seem to be more frequent in patients with relatively small femoral arteries.⁴²

These results suggest that both MAS-Trousers and intra-aortic balloon occlusion help the patient with a splenic injury by: (1) slowing the rate of hemorrhage; and (2) shunting blood to the heart and brain. The balloon seems more effective than the trousers in achieving these objectives. We are currently undertaking a large, randomized study to confirm the results published in this pilot study. In the near future, we will begin investigating different types of intermittent occlusion to minimize ischemic damage to the kidneys and spinal cord.

Perhaps the occluding balloon will be of greatest benefit when used to stabilize critically injured patients who do not respond to conventional therapy prior to transfer to a major trauma center. In the near future, the Emergency Medicine and Trauma Center will, on request, fly a physician via Medi Flight to help stabilize seriously injured trauma patients, and if indicated, use the occluding intra-aortic balloon prior to transfer. The intra-aortic balloon is generally used for those patients who would not survive with standard therapy alone.

Summary

The data indicate that MAS-Trousers and intra-aortic balloon occlusion can reduce hemorrhage and hemodynamically stabilize dogs with se-

vere splenic trauma. The intra-aortic balloon provides better hemodynamic stability and hemorrhage control than MAS-Trousers in massive intra-abdominal bleeding. In the near future, this percutaneous intra-aortic balloon may be used in patients with massive abdominal injuries requiring transfer who cannot be hemodynamically stabilized with intravenous fluids and MAS-Trousers.

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Treating Colds and Flu the Chinese Way

(Second of two parts)

HONG LIU

What Herbs Are Used and How They Work

Medication in Chinese medicine consists mainly of herbs in their natural form. There are few fixed, ready-made prescriptions. Most of the time, the doctor has to select the herbs and combine them in different ratios for the particular patient and the particular visit. The prescription is then made up and boiled, the patient taking only the concoction.¹⁷

Two classifications govern the choice of herbs: the nature of the herbs and the effects of the herbs. Within the nature classification, there are two subcategories: property and taste. Regarding property, all herbs are classified under four categories: cold, hot, cool, and warm. Cold and cool propertied herbs are used to eliminate excessive heat in the body, while hot and warm propertied herbs are used to bring up the body temperature. As for tastes, all herbs fall into six groups: sour, bitter, sweet, spicy,¹⁸ salty, and tasteless. Different tastes bring different results.¹⁹

Such classification is too broad for practice. Another classification, often used in combina-

tion with the first, groups herbs according to their effects. Generally, there are ten effects: tonic; purgative; sedative; sweat-causing; elimination of stifling feeling in the chest; dry strenuous elimination of excessive body fluid through urine; lucrative and tonic opening of the bladder and bowels, which are closed for lack of fluid and vital energy; prevention of loss of vitality through uncontrollable sweating or loose bowels; drying up excessive sputum or "dampness"; and fluid generation.

In choosing the herbs, doctors consider both classifications before writing the prescriptions. Fortunately, most of the nature and effects of the 400 most frequently used herbs are already known; the doctors, in prescribing, have only to draw on their knowledge of the particular group of herbs for the particular sickness.

In the case of disease resulting from outward causes and having fever as the main symptom, there are about forty commonly used herbs.²⁰ They are grouped according to their properties. Warm-propertied herbs are used for sickness of cold origin, while cool-propertied herbs are used for sickness of hot origin. Rarely would hot- and cold-propertied herbs be called into use when sickness is still at this initial stage.²¹

The most important herbs in this group of forty are spicy and used mainly to cause sweating. Chinese medicine believes that, when sickness resulting from outward causes is still in the initial stage, the best cure is to give the disease-causing agents an outlet through the skin before they further invade the body.²²

The most frequently used sweat-causing herbs for sickness from cold disease-causing agents are mahuang (*Herba ephedrae*), cassia twigs (*Ramulus cinnamomi*), the white of the green onion (*Caulis allii fistulosi*), Chinese atractylodes (*Atractylis lancea*), and xiangru (*Elsholtzia ciliata*). Of the five, the first three are

麻黄汤 麻黄 桂枝

Mahuang
prescription

杏仁 炙甘草

used for the basic illness, while the last two are used for the "dampness" variation. Mahuang is the twig of the natural form of ephedrine. It is in the strongest sweat-causing herb.²³ Cassia twigs rank next. The two herbs are frequently used separately in prescriptions, but in severe cases of abhorrence of coldness and high fever due to no sweating, they are used together. At such times, the ratio of the two is determined by the severity of the symptoms. If the patient has a terrible abhorrence of coldness, a high fever, no sweat, aching joints, and tight, aching skin, more mahuang than cassia twigs would be used. Otherwise the ratio is normally an equal amount of each. The white of green onion is always used with tasteless preserved soybean to cause sweating.

Chinese atractylodes is spicy, bitter, and warm-propriety. Its bitterness has the effect of drying up excessive "dampness" in the body. Consequently, besides causing sweating through its spicy property, the herb can eliminate typical "dampness" symptoms: arthritic aching in the joints, nausea, loose bowels, a stifling feeling or fullness in the chest and stomach, edema, and thick white coating on the tongue.

Xiangru, resembling mahuang in property but milder, substitutes for mahuang in the summer.²⁴ Seldom used with cassia twigs as mahuang often is, xiangru is always used with

wrinkled giant hyssop (*Herba agastachis*), an herb that is spicy and slightly warm-propriety and is particularly good at eliminating "dampness" symptoms caused by cold disease-causing agents. Such symptoms include a stifling feeling in the chest, nausea, loss of appetite, listlessness, thick white coating on the tongue, etc. The philosophy behind the combination of these two herbs is that in summer excess humidity often causes the patient to succumb to a combination of "dampness" and other disease-causing agents, a circumstance that wrinkled giant hyssop can deal with better than cassia twigs.

Just as all the sweat-causing herbs for sickness of cold origin are warm propriety, so almost all the sweat-causing herbs for sickness caused by hot disease-causing agents are cool or cold propriety. Those frequently used are peppermint, cicada slough (*Periostracum cicadae*), preserved soybean, root of kudzu vine (*Radix puerariae*) Chinese thoroughwort (*Bupleurum falcatum*), white mulberry leaf (*Folium mori*), and chrysanthemum. Unlike the above group of warm-propriety herbs, these cool-propriety herbs do not play a major part in the prescription because, in sickness resulting from hot disease-causing agents, the high fever and the general symptoms are produced more by excessive heat in the body than by any pent up disease-causing agents waiting for an outlet. The main purpose of the prescriptions then is to eliminate the heat.

The rest of the herbs in the group specialize in curing particular symptoms.²⁵ Several herbs may specialize in curing a single symptom; the only differentiating criteria then are the herbs' properties and the nature of the sickness. For example, apricot kernel, fritillary bulb (*Bulbus fritillariae thunbergii*), and peel of Mongolian snakegourd (*Pericarpium trichosanthis*) specialize in stopping the cough. However, none is universally applicable. Apricot kernel is warm-propriety and can be used only when the cough originates from cold disease-causing agents, while the others are cool-propriety and can only be used for the cough originating from hot disease-causing agents.

The explanations offered above for the use of herbs are standard explanations in Chinese medicine. Viewed from the perspective of modern science, these accounts sound at best vague, bordering on mysterious. The explanations name the relationship between the herb and the symptom rather than the relationship be-

tween the medicine and the *objective cause* of the symptoms. This situation is brought about by peculiar historic situations. Chinese medicine never explored the laboratory approach: its laboratory was the patient. Through thousands of years of experiments on man, certain herbs were found to be very effective for particular symptoms under particular circumstances. The explanations are rationalization of the effects *after they have already been established*. However, the rationalization is not pure guesswork; it is founded on facts, eg, the taste and the property of herbs — which can be tasted — and the cold and hot symptoms of sickness — like the abhorrence of coldness and the craving for cold drinks — which are self-evident. However, these facts are not the kind to satisfy the modern scientific man, who has all the possible equipment to trace the cause of a sickness, were the cause observable.

Since the beginning of this century, Western doctors and Western-trained Chinese doctors have become increasingly interested in Chinese medicine. Much laboratory research using herbs and prescriptions has been conducted in an effort to explain the herbs' obvious but mysterious effects. One group of researchers found that most of the herbs with spicy taste contain volatile oils which, according to Western pharmacology, can create a mild local irritation, cause sweating, bring down fever, kill pain, eliminate sputum, relieve gastric discomfort, kill bacteria, and increase the volume of urine.²⁶ Another group of researchers found further that most of the spicy herbs used in Chinese medicine to cause sweating can resist virus, gram-positive coccus, gram-negative coccus, tubercle bacillus, and fungus.²⁷ However, these laboratory researchers could not explain why gypsum (*Gypsum fibrosum*), cicada slough, and the root of kudzu vine, which do not have volatile oils or antiviral and antibacterial qualities, can bring about sweating. Nor can the laboratory explanations clarify why some of the sweat-causing herbs mentioned in this article can also cure asthma, cough, loss of voice, headache, aching joints, and rash, and even improve the sight.²⁸

The explanation Chinese medicine offers for the puzzle is that most of the herbs in this article act in one way or another on the "lung," a concept which includes, besides the physical lung, most of the circulation systems, in particular the blood circulation, part of the digestive system (discharge of the waste), and the

skin. All sickness originating from outward causes is believed to affect the "lung" at the initial stage.

What is the equivalent of the concept "lung" in modern Western medicine? One group of researchers found that most of the patients suffering from chronic bronchitis have autonomic nervous system disorders.²⁹ Chronic bronchitis is characterized by cough and asthma, believed to be prime "lung" symptoms in Chinese medicine. A bold hypothesis may then be drawn from this evidence — the Chinese concept of "lung" includes, at least, part of the autonomic nervous system. If this hypothesis

桂枝湯 桂枝、白芍、

Cassia twigs 炙甘草、生姜、

大枣

is correct, then much of the puzzle concerning the herbs' mysterious effects would be solved; instead of directly killing off the objective causes of sickness, most of the time the herbs stimulate the nervous system, rousing potential body resistance to fight off the foreign invaders.

If this hypothesis could be proved, a great deal more mystery would be cleared, eg, the mysterious effect of sweating. Aspirin can cause a good, decent sweating, but it cannot cure colds or flu. How is it then that the Chinese herbs appear to cure the sickness merely by causing sweating? The mystery became even more profound when it was learned that the major sweat-causing herbs *cannot effect sweating by themselves*. The strongest sweat-causing herbs cannot bring about sweating unless the patient is covered by layers of blankets right after the dose, which is to be taken hot; otherwise sweating does not result.³⁰ Sweating thus is caused more by the warmth of the blanket and the dose than by the herbs themselves.

The true cause of sweating is explained, but the question of how great a part it plays in the cure is still unsettled. Chinese medicine believes that sweating alone brings about a complete cure. This belief is founded, of course, on the observation of symptoms. An application of modern technology showed merely that the per-

centage of herbs is the same in the sweat as in the serum. This mystery could be unraveled, however, if it could be proved that the herbs stimulate organs other than those connected with the sweating function.

Some Defects in Chinese Medical Practice

Effective as it is, Chinese medicine has many obvious defects. The most obvious and dangerous one is its lack of objective standard for symptoms. Part of the description of symptoms depends on the patients, whose sensitivity to symptoms can vary greatly. The doctor's experience also plays a great part in the diagnosis. For example, the variations of the pulse and the various shades of the tongue's color are, until recently, only described in words, not more objectively recorded or photographed. Interpretation, then, depends entirely on experience. Misdiagnosis is not at all uncommon, and historically, misdiagnosis in epidemics — resulting in totally wrong treatment — occurred only too often.

A no less serious defect is the little attention paid to collecting all the ancient manuscripts and books written on Chinese medicine. There are few Chinese medical classics, but these few are commented on and discussed, and illustrated with personal experiences, in hundreds of manuscripts and books written throughout the ages. Little effort has been made to categorize and assemble these invaluable materials into collections. Some of them have not been reprinted for quite a long time, while others have already been irretrievably lost.

Were the manuscripts and books easily accessible, great difficulty would still remain in absorbing the knowledge. Most of the medical books were written in a very condensed, telegraphlike prose. This particular prose has its origin in *The Tract on Diseases Caused by Cold Disease-Causing Agents*,³¹ written in the third century. At that time the necessary writing instruments — paper, brush, and ink — were either newly invented or still unknown, making recording very difficult. With the medical knowledge still in its infancy, the ancient classic was written in a very simple, terse manner. Later generations worshipped the tract, studying not only the knowledge it offered but also its prose. Doctors prided themselves on being able to write the same condensed prose, believing that somehow it would dignify the

content. As the vogue became more prevalent, more and more information was left out for the sake of the prose, sometimes even the description of exact symptoms. This tradition continued even after printing became available and is still seen occasionally today. Time, however, did make a little difference. The classic prose is used now more for covering up ignorance than for classic clarity or stylistic polish.

Tied up with the last defect is an even more serious one that originated in the bible of Chinese medical philosophy, *The Yellow Emperor's Canon of Internal Medicine*. This classic, written about two thousand years ago, incorporated into the medical philosophy a great deal of the mysterious and meaningless theory about the elixir of life, made popular by the then powerful sorcerers. This incorporation was religiously upheld by later generations until the last century; most doctors felt impelled to cite the classic's philosophy to justify their diagnoses. Much practical knowledge was thus obscured by meaningless concepts. Much labor would be needed to comb the practical truth from the meaningless philosophy, but this vast project has not quite begun.

Conclusion

Because of historic limitations, Chinese medicine recognizes only the observable symptoms and the effects of the herbs. Primitive as it is, such diagnosis has its advantage. Ignorant of the objective causes of sickness and the chain of stimulations that leads to a cure, Chinese medicine considers the patient and the sickness as a whole, seeking to cure the two as one instead of trying merely to remove the objective cause.³² In curing colds and flu, the ancient medicine has not discovered new chemicals to battle a virus of which it is completely ignorant. It simply recognizes the symptoms and employs the herbs that are particularly effective for those outward manifestations of sickness. So far, scientific explanations for the herbs' obvious but mysterious effects have not been put forth.

Thousands of years of direct experiment on man have made Chinese medicine a very effective physical medicine, though not in surgery. It is a pity that the medicine is not more universally applied. Much research and translation must be done before the ancient medicine can benefit other than the one billion people in China. The sooner the labor is begun, the better.

Endnotes

17. The preparation normally undergoes no procedure other than fifteen to thirty minutes of boiling in plain water.

18. The word *spicy* conveys only part of the intended meaning. The particular taste I am trying to express here includes spicy, aromatic, and hot; in short, any taste that sends a stinging sensation up the nose, producing either a pleasant or unpleasant sensation, eg, the taste of ginger, peppermint, and chrysanthemum.

19. Sour-tasting herbs can stop abnormal outflow of body fluid as in the case of excessive sweating and loose bowels. Bitter-tasting herbs can dry up excessive body fluid or effect an outlet through urine. Sweet-tasting herbs have tonic qualities and can modify the effect of strong herbs. Spicy herbs can disperse "dampness," help bitter-tasting herbs to eliminate excessive body fluid, and effect sweating. Salty herbs can soften hard objects and are used most frequently for constipation. Tasteless herbs are good in eliminating excessive body fluid through urine.

20. For lack of space, the types of sickness dealt with in this article are the most basic ones, and so are the herbs mentioned.

21. For some of the emergency variations (eg, cold extremities, bloodless lips and complexion, and a small, low voice, or burning palms and soles, an abnormally redder, smaller and thinner tongue, and a small, fast pulse) hot- and cold-propriety herbs are employed.

22. Chinese medicine believes all sickness can be cured either by one of the following eight methods or by a combination of several: sweating, vomiting, purging, regulating the function of internal organs, eliminating the excessive heat, bringing up the body temperature, dissolving and eliminating substantial accumulation in the body (eg, tumor, constipation and sputum), and tonically restoring.

23. I was very shocked when I found that in Western medical books ephedrine is prescribed for long periods of use. A Chinese doctor would not dream of giving such advice to a patient. Mahuang can accelerate the heart rate, a stimulation that can be dangerous if applied repeatedly. Chinese doctors never use the herb alone; it always has accompanying herbs to restrain its effect. But even so, mahuang can still be too strong for a patient.

24. Xiangru and mahuang have the same qualities. Both are spicy, warm-propriety, and are mainly used for sweating purposes. However, ancient experience teaches that mahuang should never be used in summer, when xiangru should take its place.

25. For a list of herbs and their specializations see footnotes 11, 13, 15, and 16.

26. This information is based on *Zhong Yao Da Ci Dian* (*The Dictionary of Herbs*) compiled by the Jiangsu Chinese Medical College staff (Shanghai: Shanghai People's Publishing House, 1977), under the respective items of each herb mentioned in this article; *Zhong Yao He Fang Ji Xue* (*Herbs and Prescriptions*) compiled by the Shandong Chinese Medical College staff (Jinan: Shandong People's Publishing House, 1976), pp 93-133; Qiu De Wen and Zhang Rong Chuan, *Ten Chapters on the Chinese Way of Healing* (Gui Yang: Guizhou People's Publishing House, 1981), pp 20-21.

27. Ibid.

28. Besides employing the herbs that have not been proved by modern scientific method to contain any useful elements, Chinese medicine sometimes excludes herbs proved scientifically useful. Take the example of licorice root. Laboratory research has proved that it has antiviral and antibacterial qualities, can bring down fever, takes care of cough and convulsions, dilates blood vessels, and is good for the liver (*The Dictionary of Herbs* under the item

"Licorice root" and Qiu, pp 37-38). In practice, licorice root is used in prescriptions for most of the types and variations mentioned in this article. However, it is not used for the "dampness" variations, the philosophy being that it is sweet and therefore sticky, which would hamper the effort to clear the "dampness."

银翘散. 银花, 连翘.

Honeysuckle flower
and weeping forsythia
prescription 豆豉, 荆芥,

薄荷, 牛蒡,

桔梗, 甘草,

竹叶, 芦根

29. Qiu De Wen and Zhang Rong Chuan, *Ten Chapters on the Chinese Way of Healing* (Gui Yang: Guizhou People's Publishing House, 1981), pp 20-21.

30. In *The Tract on Disease Caused by Cold Disease-Causing Agents*, the direction for administering the mahuang prescription is to take the dose hot and to cover the patient carefully with a blanket.

31. For information on the classic see footnote 7.

32. Thus, many incurable diseases in Western medicine, especially those caused by disorders of the nervous system, are curable in Chinese medicine.

I believe a difference exists between Chinese medicine and the holistic trend in Western medicine. Holistic medicine, if I understand correctly, stresses the mental — spiritual or psychological — aspect of the patient in treatment, putting less emphasis on medicine. Chinese medicine, on the other hand, stresses medication. It recognizes disease-causing agents — including germs — and does not believe the body can right itself without the help of medication. In a sense, Chinese medicine combines both the holistic and the traditional trend in Western medicine. (Acupuncture plays only a minor part in Chinese medicine. Because of language barriers and its mastery of acupuncture's easy technique, the Western world frequently mistakes acupuncture as a major part of Chinese medicine.)

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Hong Liu is currently working on a master's degree in English literature at Oklahoma State University. She studied both English and medicine with the help of her father, a traditional Chinese doctor, before coming to the United States two years ago to complete her postgraduate work. She hopes eventually to earn a degree in Western medicine.



News from the Oklahoma State Department of Health

Surveillance for influenza and influenzalike illness in Oklahoma, 1983-1984

The Epidemiology Service and the Immunization Division of the Oklahoma State Department of Health collaborated with 107 physicians, 11 emergency rooms, 23 schools, and 12 county health departments to develop an active surveillance system for influenza and influenzalike illness during the 1983-1984 season. The system involved weekly contact by local health representatives with each reporting source.

The purpose of the surveillance system was to monitor the extent and distribution of influenza activity, and to collect specimens for viral culture and typing. The definition of a case of influenzalike illness includes, as a minimum, cough with fever of 101° F or greater, without any obvious explanation.

Surveillance began during the week of October 23, 1983, and ended April 28, 1984. Through the first three months of the surveillance, a baseline rate of approximately 300 cases per week was reported. These cases clearly represent other viral or bacterial

infections (ie, not influenza) which occur throughout the year. Reports of influenzalike illness began to increase sharply during the last week of January, peaked in the second week of February, with over 3,000 cases reported during that week, and gradually declined during the next six weeks, returning to the baseline level in late March. Similar results were seen from viral isolate surveillance done by the Centers for Disease Control.

In contrast to previous years, national data indicate that influenza had less impact on the elderly population last year. Surveillance of deaths from influenza and pneumonia showed no significant increase during the 1983-1984 season.

Approximately 80% of the viral isolates were Influenza B, related to B/Singapore; the remainder were Influenza A (H1N1). It is notable that several new variants were identified, including B/USSR/100/83. Similar information from other parts of the world has prompted a change in the antigens which will be used in the influenza vaccine in the coming 1984-1985 year. The new vaccine will contain the strains A/Philippine/2/82, A/Chile/1/83, and B/USSR/100/83. For further updates and graphics regarding influenza surveillance and influenza vaccine recommendations, please see the Oklahoma Communicable Disease Bulletins No 10 (May 1984) and No 17 (September 1984).

The Oklahoma State Department of Health would like to express its thanks to all physicians and nurses who participated in the surveillance program. We look forward to another informative season in 1984-1985, when we hope to expand the activity to include a larger proportion of the state. □

DISEASE	July 1984	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	6	5	12
CAMPYLOBACTER INFECTIONS	24	120	101	—
ENCEPHALITIS, INFECTIOUS	4	14	21	17
GIARDIA INFECTIONS	13	102	105	—
GONORRHEA (Use ODH Form 228)	1035	7137	8996	11075
HAEMOPHILUS INFLUENZAE				
INVASIVE DISEASE	12	116	85	—
HEPATITIS A	27	220	280	231
HEPATITIS B	15	171	182	129
HEPATITIS, NON-A NON-B	5	28	28	—
HEPATITIS UNSPECIFIED	17	67	116	112
MEASLES (RUBEOLA)	1	8	1	136
MENINGITIS, ASEPTIC	13	39	192	73
MENINGITIS, BACTERIAL				
(non-meningococcal,				
non H. Influenzae)	2	30	31	33
MENINGOCOCCAL INFECTIONS	0	23	25	22
PERTUSSIS	4	206	131	34
RABIES (Animal)	6	72	83	135
ROCKY MOUNTAIN				
SPOTTED FEVER	14	81	157	76
RUBELLA	0	0	0	2
SALMONELLA INFECTIONS	51	219	279	181
SHIGELLA INFECTIONS	25	108	106	127
SYPHILIS (Use ODH Form 228)	19	112	143	97
TETANUS	0	0	0	0
TUBERCULOSIS	16	138	126	179
TULAREMIA	3	14	18	13
TYPHOID FEVER	0	2	3	0

Diseases of Low Frequency	Total to Date This Year
ACQUIRED	
IMMUNE	
DEFICIENCY	
SYNDROME	4
BRUCELLOSIS	4
LEGIONNAIRES	
DISEASE	14
MALARIA	6
REYE'S	
SYNDROME	14
TOXIC SHOCK	
SYNDROME	10
RABIES	
CADDIS	SKUNK 1
GRADY	DOG 1
GRADY	SKUNK 1
McCLAIN	SKUNK 1
MAYES	SKUNK 1
PAYNE	DOG 1

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Methaqualone now C-1, should be surrendered

A new federal law has classified methaqualone C-1, making it illegal for physicians to possess or distribute the drug. Will Morris, regional director for the Drug Enforcement Agency (DEA) in Dallas, reports the law became effective August 27, 1984, and gives doctors 60 days to surrender their stock.

Physicians wishing to dispose of their supply of the drug should contact a DEA agent; an inspector for the State Board of Medical Examiners, at (405) 848-6841; or an agent of the Bureau of Narcotics and Dangerous Drug Control, at (405) 521-2885. An official of one of

these agencies will pick up the supply of methaqualone and provide the required DEA surrender form #41.

Further information and official notification forms may be obtained from the DEA office in Dallas. □

Oral drug works well for first episode of herpes

Researchers from three United States and two Canadian medical centers have found that acyclovir capsules are effective in reducing the duration and discomfort associated with first episodes of genital herpes simplex virus infection.

Reporting in the *Journal of the American Medical Association (JAMA)*, Gregory J. Mertz, MD, of the University of Washington School of Medicine, Seattle, and colleagues from there and four other institutions describe results of a double blind study using acyclovir and a placebo. Previous published reports have described effects of acyclovir used topically (applied to the lesions) and injected intravenously for treatment of genital herpes simplex.

In this study of 150 patients (119 with primary and 31 with nonprimary first-episode genital herpes), 73 patients received oral acyclovir

Tulsa physician becomes newest Life Member

General practitioner James C. Smith, Jr, MD, Tulsa, has been awarded a Life Membership in the Oklahoma State Medical Association (OSMA). Smith's membership was approved August 12, 1984.

To be eligible for a Life Membership, a physician must be a member in good standing and meet one or more of the following qualifications: (1) retired from the active practice of medicine due to ill health or age; (2) engaged in the active practice of medicine for 50 years or more; (3) attained the age of 70 years. □

Oral drug (continued)

and 77 patients received a placebo. Among acyclovir recipients with primary genital herpes, median duration of viral shedding, time to crusting of lesions, time to healing of lesions, duration of local pain, and duration of constitutional symptoms (such as headache, malaise, muscle aches, light sensitivity, and fever) were shorter than among placebo recipients.

Among patients with nonprimary first-

episode genital herpes, oral acyclovir shortened the median duration of viral shedding but had no significant effect on the duration of lesions or symptoms. The drug also appeared to have no influence on subsequent recurrences in these patients.

The researchers note that topical, intravenous, and oral acyclovir have now been shown to be effective for treatment of primary first-episode genital herpes. "Although neither oral nor topical therapy influenced subsequent recurrences," they say, "oral acyclovir appears to have several advantages over topical acyclovir. . . . Unlike topical therapy, oral acyclovir was effective in stopping new lesion formation and also appeared to influence the duration of dysuria (painful urination) and constitutional symptoms.

"In addition, oral acyclovir therapy was not associated with the local pain and burning that accompany application of any topical medication to painful genital areas," they add.

The researchers say that direct comparison of the efficacy of oral versus intravenous acyclovir for the treatment of primary first-episode genital herpes is difficult because patients in trials of intravenous medication have tended to have more serious episodes than patients in their trial with the oral form of the drug.

They conclude that, since the drug is not a "cure" for genital herpes, patients "should be counseled about the likelihood of subsequent recurrences of the disease and of the increased risk of transmitting disease during these recurrences."

The study was supported by the National Institutes of Health and a grant from the Burroughs-Wellcome Company. □

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Autopsies after AIDS deaths reveal extensive damage

One of the first large reviews of autopsies of acquired immune deficiency syndrome (AIDS) victims demonstrates the massive systemic damage caused by the disease, including unexpected testicular damage.

Kevin Welch, MD, and colleagues from the University of California School of Medicine in San Francisco report on autopsy findings from 36 patients in the *Journal of the American Medical Association (JAMA)*. Virtually every major organ system of the body is affected by the syndrome, they say.

"This study confirms the wide spectrum of disease noted clinically in these patients. In some cases, the autopsy demonstrated that the manifestations of disease were even more protean than clinically suspected," they say. "The severe lymphoid depletion that marks the terminal stages of this disease is likely to provide the setting for the overwhelming infections usually responsible for the patients' deaths."

Affected organs included the lung, the gastrointestinal tract, and the liver. Also affected were the central nervous, lymphoid, endocrine, genitourinary, and cardiovascular systems. Cancers affecting organ systems included Kaposi's sarcoma and several lymphomas. Opportunistic infections included *Candida albicans*, *Cryptococcus neoformans*, *Histoplasma capsulatum*, *cytomegalovirus*, *Pneumocystis carinii*, and *Mycobacterium tuberculosis*.

An unexpected finding involved testicular function. In each of 20 case specimens examined, absent or markedly decreased spermatogenesis was noted.

"The finding of decreased or absent spermatogenesis in these patients is an interesting abnormality that would not be predicted by comparison with other immunodeficiency states," the researchers say. The finding was not explainable on the basis of anticancer chemotherapy, since most of the patients had only infectious complications of AIDS and since spermatogenesis is not a recognized complication of the antibiotic therapies used.

The researchers conclude, "These data provide some support for the hypothesis that anti-sperm antibodies may play a role in the development of immune deficiency."

The majority of the patients (94%) were homosexual men. Death in 83% of the patients was attributable to opportunistic infections,

most commonly affecting the respiratory tract (64%) and membranes of the brain or spinal cord (11%). Nine percent of the patients died with widely metastatic Kaposi's sarcoma and secondary hemorrhage. □

Radiotherapy effective against Kaposi's sarcoma

Radiotherapy should be considered the treatment of choice in selected cases of Kaposi's sarcoma in conjunction with acquired immune deficiency syndrome (AIDS), say Jay S. Cooper, MD, and colleagues from NYU Medical Center in New York. In the *Journal of the American Medical Association (JAMA)*, they report on 15 patients so treated. "All tumors exhibited at least partial regression, and the majority responded completely," the researchers say. Chemotherapy typically is used for such patients, but the researchers maintain radiotherapy is preferable. □

ACP backs compensation for vaccine-related injuries

Individuals who participate in childhood immunization programs and who through no fault suffer vaccine-related injuries should be compensated for expenses resulting from the injuries, stated the American College of Physicians (ACP) in a recently released position paper.

In recognition of the societal benefits of immunization programs, the national medical specialty society urges the establishment by the federal government of an adequately funded and appropriately structured program to cover the risks of such programs.

The public benefit of mass immunization programs is evident in the marked reduction in cases of infectious diseases in recent years: The rate of measles, for example, dropped from 315.2 cases/100,000 in 1950, before mass immunization, to 0.6 cases/100,000 in 1983. Cases in the United States of tetanus, diphtheria, and polio now are extremely rare (in 1983 only one case



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of tetanus, five of diphtheria, and eight of polio were documented).

The major problem with these programs, according to the ACP, "is the occurrence of an infrequent but statistically inevitable number of vaccine-related injuries that will afflict a small number of recipients, due to no fault or negligence of any party."

If injury does result from vaccination, the College believes it appropriate that those who benefit from immunization programs — individuals, society, and vaccine manufacturers — should share the costs of compensating these victims for expenses incurred while acting for

the good of society.

The ACP maintains that a federally administered program is preferred to a state administered one, primarily because it avoids inequities due to differential state incomes and to the unpredictable geographic distribution of vaccine-related injuries. Before such a program is established, however, the College notes that three issues must be clarified: (1) the types of injuries to be compensated; (2) an estimation of funds required; and (3) the source of funds. In regard to funding, the ACP judges a surcharge on manufacturers to be the most equitable solution. □

Unshelled hard-boiled eggs can harbor staph bacteria

Hard-boiled eggs that are cooled in water and not refrigerated can be a source of staphylococcal food poisoning. A recent report in the *Journal of the American Medical Association (JAMA)* describes the contamination of hard-boiled eggs that caused food poisoning in an estimated 300 of 850 children who participated in an Easter egg hunt last year.

G. Alexander Merrill, MD, MPH, of the University of California, and colleagues say that although outbreaks of staphylococcal food poisoning are relatively common, this may be the first incidence of a large-scale outbreak traced to unshelled hard-boiled eggs. The investigation began when an emergency room physician contacted the Stanislaus County (California) Health Department. The researchers later interviewed 57 children who reported experiencing vomiting, abdominal pain, and diarrhea within 12 hours after eating the eggs.

Staphylococcus aureus bacteria were apparently transmitted to the cooling water by the cook, who also stored the eggs at room temperature for three to five days. After the outbreak, the researchers conducted laboratory experiments that showed how easily cooked eggs could be contaminated. "Experimental studies demonstrated that heated eggs can absorb 2 mL of contaminated cool water through intact egg shells. When water was inoculated with pathogenic staphylococci at even low contamination levels, rapid growth and enterotoxin production . . . could easily be duplicated," they report.

"Although unbroken and uncooked eggs are

remarkably resistant to bacterial invasion, the heating process breaks down the egg's natural defense mechanisms and creates an ideal growth medium for bacteria such as staphylococci," the researchers say. They also observe that reports of contamination of whole shell eggs are rare but that there have been frequent reports of staphylococcal food poisoning in a variety of egg products, such as salads, custards, and deviled eggs. □

Book Reviews

Electrodiagnosis of Neuromuscular Diseases (Third Edition). By J. Goodgold, MD and A. Eberstein, PhD. Baltimore: The Williams and Wilkins Company, 1983, Pp 349 with 121 illustrations. Price \$34.00.

Previous editions of this book are well known to electromyographers and to clinicians interested in the utilization of electromyography and related electrophysiological procedures. The authors consider it an introduction to basic concepts and a "how to do it" instruction manual.

There is a review of the basic anatomy and physiology of the lower motor neuron cell body, the peripheral nerve, the myoneural junction and muscle, and the ways in which these can be affected by disease. This presentation is done in a scholarly manner. (continued)

Book Reviews (continued)

Various electrodiagnostic procedures utilized in the evaluation of neuromuscular disease are discussed. There is a description of traditional electromyography, not only in regard to instrumentation, but in regard to normal and abnormal findings of the examination. The application of electromyography in various disease states is included. Motor and sensory nerve conduction velocity determinations, including the utilization of the "H," "F," and also the blink reflexes are discussed in depth. There is an excellent discussion of the application of repetitive stimulation procedures in the diagnosis of diseases of the motor end-plate, including myasthenia gravis, the myasthenic syndrome, botulism, and the "new" myasthenic syndrome. It is perhaps unfortunate that the excellent discussion of the technique for carrying out repetitive nerve stimulation is not accompanied by illustrations which would clarify the methodology.

Older electrodiagnostic procedures such as chronaxie are omitted. Instead, there is a discussion of recent developments in the area of

electrodiagnosis, including single-fiber electromyography, macroelectromyography, and somatosensory evoked potentials. The discussion of single-fiber electromyography reviews the use of this technique in the evaluation of motor end-plate disorders and also mentions some newly developed applications of this technique. The chapter on somatosensory evoked potentials is written by two leading investigators in this area. Clinical utilization of this procedure in the evaluation of disorders of the peripheral nerve and the spinal cord are discussed and normal values, as well as findings in various disease states are given.

Finally, there is an appendix which consists of a glossary of terms used in clinical electromyography which has been compiled by the Nomenclature Committee of the American Association of Electromyography and Electrodiagnosis. Current as well as obsolete terms are listed. For example, use of terms such as *myopathic motor unit potential*, *myopathic recruitment*, *neuropathic motor unit potential*, and *neuropathic recruitment* is discouraged. This is useful since these archaic terms are still seen in some electromyographic reports.

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This text should be a useful addition to the library of anyone performing electromyography and nerve conduction studies, and to those who refer patients for such studies. The book is an excellent review of the current state of the art of the techniques of electrodiagnosis. It could never serve as the sole text for individuals who are performing the various procedures, and would be a disappointment to one wishing to purchase a single book that discusses the theory, clinical application, and specific techniques for performing the procedures.

Perhaps the most commendable portion of the text is the strong statement in the introduction regarding the way in which electrodiagnosis of neuromuscular diseases should be conducted. The author states, "The performance of these electrophysiologic studies does not fall into the category of laboratory tests carried out by technicians. Rather, they are physician oriented and truly represent the *extension of the history and physical examination* used in clinical assessment of disease of the neuromuscular system." If, after completing the book, the

reader fully understands the significance of this statement, the text has served a worthwhile purpose.

John W. Nelson, MD
Department of Neurology
University of Oklahoma College of Medicine
Oklahoma City, Oklahoma

Gynecologic Surgery, Errors, Safeguards, Salvage. By John H. Ridley, MD. Baltimore: The Williams and Wilkins Company, 1981. Pp 384 with 204 illustrations; price not given.

This second edition is a monumental contribution to knowledge of pelvic surgery. The standard descriptions of how to perform pelvic surgical procedures remain those written by Richard W. TeLinde, MD. This text is a significant complement to the text by Dr TeLinde. In addition to stressing the basic surgical techniques, the authors describe the potential errors, how to guard against making those errors, and how to correct the situation should an undesired occurrence arise.

There is an old saying that goes something like this: "There are three kinds of surgeons. First, there are those who are well trained and evaluate their patients thoroughly, and who

In Memoriam

1983

<i>Harold J. Black, MD</i>	<i>September 1</i>
<i>Marque O. Nelson, MD</i>	<i>December 24</i>
<i>Park H. Medearis, MD</i>	<i>December 26</i>
<i>Charles S. Beaty, MD</i>	<i>December 28</i>

1984

<i>Jack H. Foertsch, MD</i>	<i>January 19</i>
<i>Thomas L. Ozment, MD</i>	<i>February 11</i>
<i>Thomas L. Foster, MD</i>	<i>February 25</i>
<i>Robert W. Lowrey, MD</i>	<i>February 27</i>
<i>Ella Mary George, MD</i>	<i>March 1</i>
<i>Kemper C. Lain, MD</i>	<i>March 8</i>
<i>William R. Cheatwood, MD</i>	<i>March 12</i>
<i>William A. Dean</i>	<i>March 19</i>
<i>Charles H. Cooke, MD</i>	<i>March 23</i>
<i>Donald J. Worden, MD</i>	<i>April 1</i>
<i>William I. Jones, MD</i>	<i>April 3</i>
<i>Paul Kernek, MD</i>	<i>May 9</i>
<i>Leon C. Freed, MD</i>	<i>June 12</i>
<i>William D. Bolene, MD</i>	<i>June 18</i>
<i>Lee K. Emenhiser, MD</i>	<i>June 26</i>
<i>Grace C. Hassler, MD</i>	<i>July 14</i>
<i>Carryl W. Wiggins, MD</i>	<i>July 17</i>
<i>Solomon Papper, MD</i>	<i>August 19</i>

Deaths

SOLOMON PAPPER, MD
1922 - 1984

Solomon Papper, MD, former chairman of the department of medicine at the University of Oklahoma Health Sciences Center and former corresponding editor for the OSMA JOURNAL, died Sunday, August 19, following a lengthy illness. A native of New York City, Papper received his medical degree from New York University Medical School in 1944. From 1946 to 1948 he served as a captain in the US Army Medical Corps. Following appointments in New Mexico, Florida, and Colorado, among others, he joined the faculty of the OU College of Medicine in 1973. There he served as a distinguished professor of medicine, and was named a regents' professor earlier this year, before his retirement in June. He received numerous honors during his career, including the Best Teacher Award from the University of Oklahoma in 1974 and the University of Oklahoma Regents Superior Teaching Award in 1976.

Book Reviews (continued)

perform the necessary procedures correctly with the necessary skill and judgment, but who, unfortunately, have complications arise. Second, there are those who do not mention their complications or maloccurrences. Third, there are those who do not actually operate on patients." This text is for the first of these groups of surgeons.

The text should be on the required reading list of all gynecological surgery training programs. It should be read by those gynecological surgeons who have already completed their training. Any surgeon using information in this text will enhance his care of patients.

The authors of this text are all superbly trained pelvic surgeons with many years of clinical experience. The complications they describe are those that all too frequently are the subject of litigation. It is fitting that the last and eleventh chapter is on gynecological errors and medical malpractice. Since the specialty of gynecology and obstetrics now has one of the largest number of medical malpractice cases, the following excerpt from this last chapter is most appropriate:

Since almost every surgeon will encounter some of the statistically inevitable "errors" (in the neutral sense of maloccurrence) during the course of his practice and therefore be subjected to at least the risk of malpractice claim, a surgeon ought to be generally aware of the legal standards of malpractice, the current state of malpractice theories, office procedures which can be used to minimize the likelihood of a malpractice claim, and the direction in which medical malpractice claims are likely to develop in the future.

*S. L. Atkinson, MD
Oklahoma City Clinic
701 NE 10th
Oklahoma City, Oklahoma*

Modern Trends in Fertility and Conception Control. Edited by Edward E. Wallach, MD, Roger D. Kempers, MD, Baltimore: Williams and Wilkins Company, 1979, pp 439, price not given.

It will be apparent to those who are interested in the multifaceted concerns of reproductive medicine that this volume is a selection of previously published articles taken from *Fertility and Sterility* over the past three years. Why then this book?

In its present form, editors Edward Wallach and Roger Kempers have compiled an informative survey of the current diagnostic and therapeutic issues in infertility, reproductive endocrinology, and conception control. The 54 authors have diverse backgrounds and each has contributed to the high quality of the 36 chapters.

The chapters are adeptly divided into five sections: the surgical approaches to female fertility, reproductive endocrinology, cervical factors in infertility and artificial insemination, male infertility and contraception, and female contraception and sterilization. Each section includes a variety of diverse topics with particular emphasis on diagnostic and therapeutic techniques. Each of the 36 chapters has a complete bibliography with historical review and current literature references.

The nongloss paper, clarity of diagrams and photos, and complete index foster easy readability.

Who should buy this book? It is a superb resource that will provide scope, breadth, and depth to the clinician, academician, investigator, and scientist. For anyone wanting a concise, updated review of issues in fertility and sterility this is an ideal source and I recommend it highly.

*A. J. McMaster, MD
Department of Gynecology and Obstetrics
University of Oklahoma College of Medicine
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Incidence Greater than 1% (but less than 3%)—Probable Causal Relationship

Gastrointestinal: Nausea,* epigastric pain,* heartburn,* diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence); **Central Nervous System:** Dizziness,* headache, nervousness; **Dermatologic:** Rash* (including maculopapular type), pruritus; **Special Senses:** Tinnitus; **Metabolic/Endocrine:** Decreased appetite; **Cardiovascular:** Edema, fluid retention (generally responds promptly to drug discontinuation; see PRECAUTIONS)

Incidence less than 1%—Probable Causal Relationship**

Gastrointestinal: Gastric or duodenal ulcer with bleeding and/or perforation, gastrointestinal hemorrhage, melena, gastritis, hepatitis, jaundice, abnormal liver function tests; **Central Nervous System:** Depression, insomnia, confusion, emotional lability, somnolence, aseptic meningitis with fever and coma; **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme, Stevens-Johnson syndrome, alopecia; **Special Senses:** Hearing loss, amblyopia (blurred and/or diminished vision, scotomata, and/or changes in color vision) (see PRECAUTIONS); **Hematologic:** Neutropenia, agranulocytosis, aplastic anemia, hemolytic anemia (sometimes Coombs positive), thrombocytopenia with or without purpura, eosinophilia, decreases in hemoglobin and hematocrit; **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure, palpitations; **Allergic:** Syndrome of abdominal pain, fever, chills, nausea and vomiting, anaphylaxis, bronchospasm (see CONTRAINDICATIONS); **Renal:** Acute renal failure in patients with pre-existing significantly impaired renal function, decreased creatinine clearance, polyuria, azotemia, cystitis, hematuria; **Miscellaneous:** Dry eyes and mouth, gingival ulcer, rhinitis.

Incidence less than 1%—Causal Relationship Unknown**

Gastrointestinal: Pancreatitis; **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities, pseudotumor cerebri; **Dermatologic:** Toxic epidermal necrolysis, photoallergic skin reactions; **Special Senses:** Conjunctivitis, diplopia, optic neuritis; **Hematologic:** Bleeding episodes (e.g. epistaxis, menorrhagia); **Metabolic/Endocrine:** Gynecomastia, hypoglycemic reaction; **Cardiovascular:** Arrhythmias (sinus tachycardia, sinus bradycardia); **Allergic:** Serum sickness, lupus erythematosus syndrome, Henoch-Schönlein vasculitis; **Renal:** Renal papillary necrosis.

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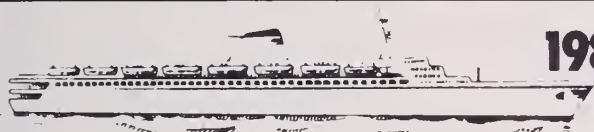
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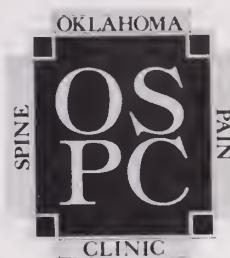
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NEWS

Members of the Oklahoma State Medical Association, the constituent societies of the association, and all readers in general are invited to supply news items of general interest to the profession.

ADVERTISING

All advertising copy must be approved by the Editorial Board before acceptance for publication. General and miscellaneous advertising rates will be sent on request.

EDITING SERVICE

The Editorial Board reserves the prerogative to submit contributions to a Medical Editing Service when warranted. If such is felt necessary, the Editor will contact the author for approval, informing him that there will be a modest charge for this service.

REPRINTS

Authors will receive reprint order forms from the Transcript Press, PO Drawer 1058, Norman, Oklahoma 73070, prior to final publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

BACK ISSUES

Microfilm copies of back issues of *The Journal* may now be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

The role of Auxiliary is rapidly changing and for this reason two new projects have been implemented by the OSMA Auxiliary.

1. Project MEDVOTE is the American Medical Association's program to identify unregistered members, spouses, family members, and employees. Register them to vote and encourage their active participation in the 1984 general election. A recent survey in two heavily urban counties showed that over 40% of the AMA members were not registered and could not vote.

The stakes are high in the 1984 election. Including the race to select the President, Oklahomans will be selecting 6 US House of Representatives seats, 1 US Senate seat, approximately 124 State House and Senate seats, and numerous local officials. With the stakes so high, it is expected that voter participation will be less than 55% of the country's total eligible voters. Simply put, the leaders of our federal, state, and local offices could be, and in many cases will be, selected by the minority and not the majority. We strongly urge all auxiliaries to

make sure their voter registrations are current, and then encourage their spouses, family members, and physicians' employees to register and *VOTE!*

2. Image. As many of us are keenly aware, the image of the physician as well as Auxiliary has declined. The state auxiliary is trying to improve our image by making OSMA Auxiliary more visible. Thus, we are developing several public service announcements (PSAs) for radio and television that will be distributed to constituent auxiliaries across the state for airing on local stations. The first PSA focuses on childhood immunizations. Others forthcoming will focus on seatbelt safety, organ donation, and breast self-examination. Many other topics can certainly be covered, and we welcome any suggestions. We hope each county auxiliary will utilize these PSAs in its community by adding the auxiliary's name as a co-sponsor of these announcements.

Pam Oster
OSMAA President

■ **Jimsonweed abuse is a potentially serious** form of substance abuse in adolescents and young adults, say two researchers from Maryland Poison Center in Baltimore. Writing in the *American Journal of Diseases of Children*, Wendy Klein-Schwartz, PharmD, and Gary M. Oderda, PharmD, MPH, report on 73 cases of jimsonweed exposure reported to the center over a five-year period. "Although 11 callers remained at home, 59 required medical care in an emergency department or were admitted to the hospital," they say. Almost half needed treatment for severe hallucinations. Jimsonweed contains belladonna alkaloids, atrophine, and scopolamine.

■ **A new test for gonorrhea**, with results available in three hours instead of two days or more, is both sensitive and specific, according to Efstratios Demetriou, MD, of the University of Oklahoma Health Sciences Center, and colleagues writing in the *Journal of the American Medical Association (JAMA)*. The study included 839 patients tested by an enzyme immunoassay that was 90% sensitive and 98% specific. Predictive values for a positive and a negative test result were 88.5% and 98.3% respectively, the researchers say. They call it a highly acceptable substitute for the standard culture test.

■ **The Great American Smokeout**, sponsored annually by the American Cancer Society, is November 15 this year. Physicians and their patients who smoke are urged to stop smoking that day and show themselves that quitting is possible.

■ **A patient with acute myeloblastic leukemia** and extensive herpes simplex virus infection was treated successfully with human leukocyte interferon and minimal doses of cytarabine hydrochloride (anticancer compound). "Complete and rapid healing of skin lesions with remission of the leukemia occurred during 15 days of therapy," say Yoseph Shalev, MD, and colleagues of Israel's Kaplan Hospital, in the *Archives of Dermatology*.

■ **A 24-page booklet**, "What Your Patients Should Know . . . About DRGs and the Prospective Payment System," is available from the American Medical Association (AMA). The booklet is designed to assist physicians in answering patient inquiries. It also may be read and understood easily by the patients themselves. It describes how and why Congress developed prospective pricing and provides an overview of how the system is intended to work in hospitals. Copies are available for \$1 each for up to 99 copies, 75¢ each for 100 to 500 copies, and 60¢ each in larger quantities. Write to AMA Order Department, OP-336, PO Box 10946, Chicago, Illinois 60610.

■ **Body fluid loss during exercise** causes greater heat storage within the body and reduces athletic endurance, according to Michael N. Sawka, PhD, and colleagues from the US Army Research Institute of Environmental Medicine in Natick, Mass. Writing in the *Journal of the American Medical Association (JAMA)*, they say that gender, acclimation, and aerobic fitness do not alter the fact that hypohydration increases heat storage in the body. "Hyperhydration, or body fluid excess, does not seem to provide a clear advantage during exercise-heat stress, but will delay the development of hypohydration," the researchers say.

■ **Randomized, controlled clinical trials** of routine ultrasound screening during pregnancy should be conducted in the United States, according to a consensus conference conducted by the National Institutes of Health (NIH). Appearing in the *Journal of the American Medical Association (JAMA)*, the conference report states, "A long-term follow-up of infants involved in a randomized clinical trial would help clarify questions about the effect of ultrasound on development in humans." Ultrasound has been widely used in assessing fetal life and, while no adverse effects have been demonstrated in humans, a hypothetical risk must be presumed, according to the conference panel.

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References: 1. Kales J et al: *Clin Pharmacol Ther* 12:691-697, Jul-Aug 1971. 2. Kales A et al: *Clin Pharmacol Ther* 18:356-363, Sep 1975. 3. Kales A et al: *Clin Pharmacol Ther* 19:576-583, May 1976. 4. Kales A et al: *Clin Pharmacol Ther* 32:781-788, Dec 1982. 5. Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc* 27:541-546, Dec 1979. 6. Kales A, Kales JD: *J Clin Pharmacol* 3:140-150, Apr 1983. 7. Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther* 21:355-361, Mar 1977. 8. Zimmerman AM: *Curr Ther Res* 13:18-22, Jan 1971. 9. Amrein R et al: *Drugs Exp Clin Res* 9(1):85-99, 1983. 10. Monti JM: *Methods Find Exp Clin Pharmacol* 3:303-326, May 1981. 11. Greenblatt DJ et al: *Sleep* 5(Suppl 1):S18-S27, 1982. 12. Kales A et al: *Pharmacology* 26:121-137, 1983.

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Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, light-headedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, e.g., excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. **Adults:** 30 mg usual dosage; 15 mg may suffice in some patients. **Elderly or debilitated patients:** 15 mg recommended initially until response is determined.

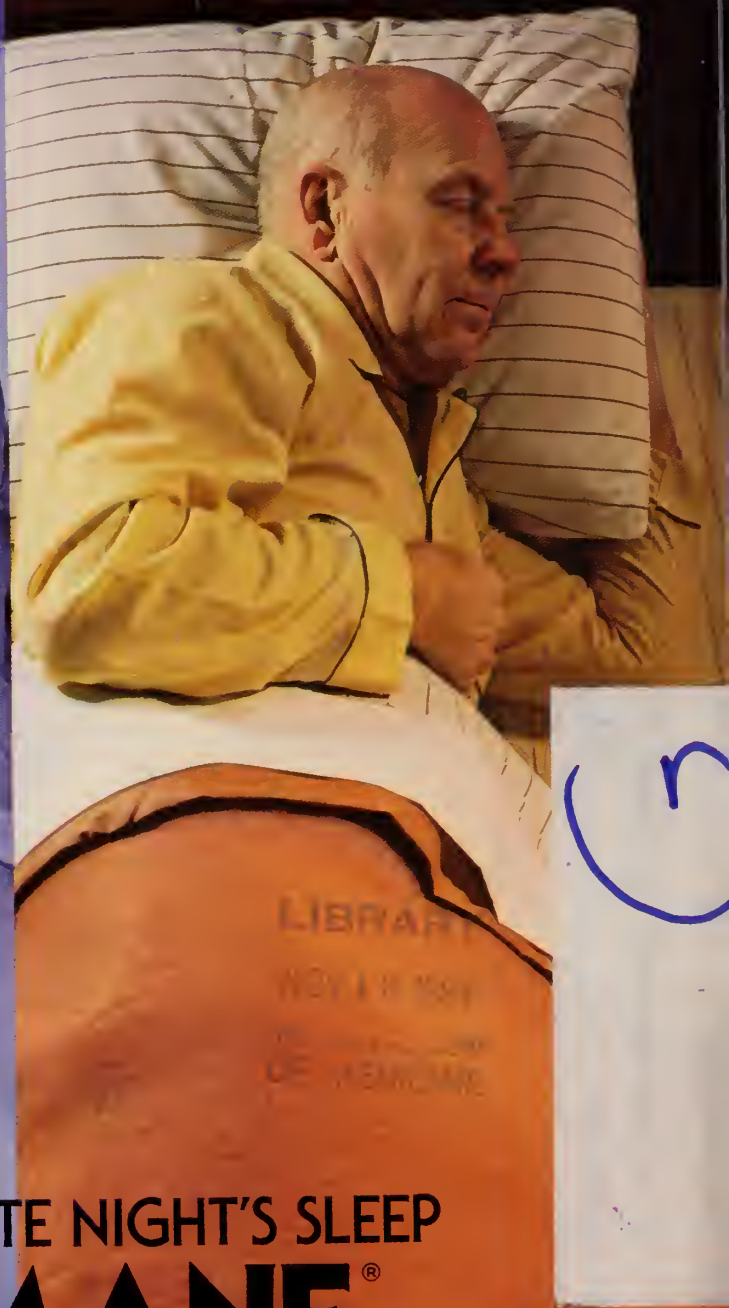
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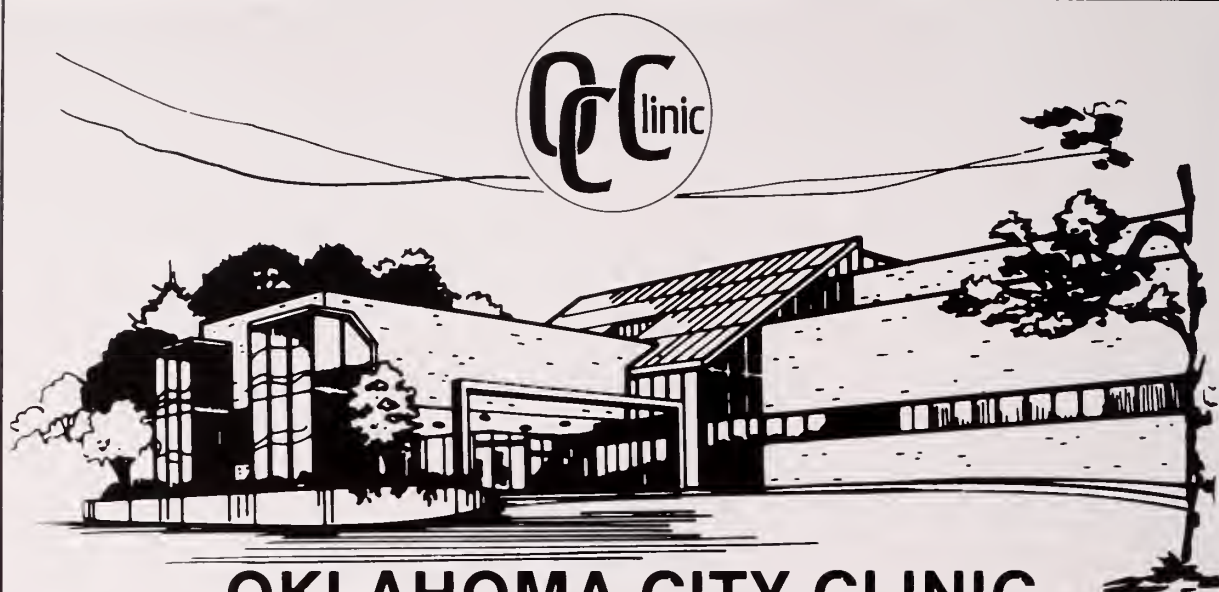
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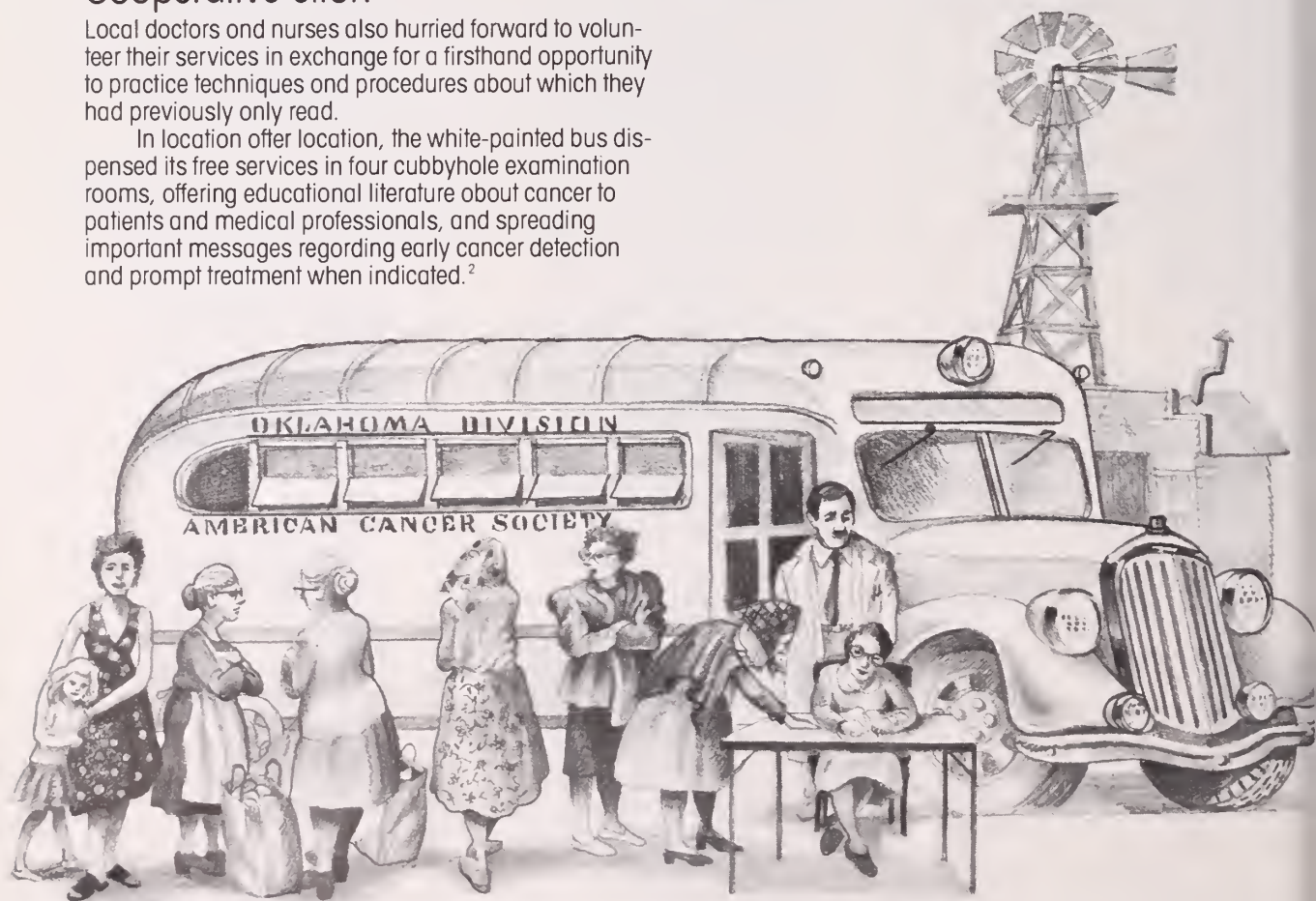
Local doctors and nurses also hurried forward to volunteer their services in exchange for a firsthand opportunity to practice techniques and procedures about which they had previously only read.

In location after location, the white-painted bus dispensed its free services in four cubbyhole examination rooms, offering educational literature about cancer to patients and medical professionals, and spreading important messages regarding early cancer detection and prompt treatment when indicated.²

The idea caught on

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References: 1. Kone JN. *Famous First Facts*, 3rd ed. New York, The H. W. Wilson Co., 1964, p. 367. 2. Data on file, Hoffmann-La Roche Inc., Nutley, NJ.



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References: 1. Rickels K. Drug treatment of anxiety, in *Psychopharmacology in the Practice of Medicine*, edited by Jarvik ME; New York, Appleton-Century-Crofts, 1977, p. 316. 2. Feighner JP et al. *Psychopharmacology* 61: 217-229, Mar. 1979. 3. Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).

Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated, sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs:

Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.

Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.

Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.

Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.

Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion.

Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Overdose: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single *h.s.* dose may suffice for some patients. Lower dosages are recommended for the elderly.

Limbitrol 10-25, initial dosage of three or four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol 5-12 5, initial dosage of three or four tablets daily in divided doses, for patients who do not tolerate higher doses.

How Supplied: White, film-coated tablets, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) and blue, film-coated tablets, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100, Prescription Paks of 50.

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vasodilation
with a low
incidence of
side effects

Low incidence of side effects

CARDIZEM[®] (diltiazem HCl) produces an incidence of adverse reactions not greater than that reported with placebo therapy, thus contributing to the patient's sense of well-being.

*Cardizem is indicated in the treatment of angina pectoris due to coronary artery spasm and in the management of chronic stable angina (classic effort-associated angina) in patients who cannot tolerate therapy with beta-blockers and/or nitrates or who remain symptomatic despite adequate doses of these agents.

References:

1. Strauss WE, McIntyre KM, Parisi AF, et al: Safety and efficacy of diltiazem hydrochloride for the treatment of stable angina pectoris: Report of a cooperative clinical trial. *Am J Cardiol* 49:560-566, 1982.
2. Pool PE, Seagren SC, Bonanno JA, et al: The treatment of exercise-inducible chronic stable angina with diltiazem: Effect on treadmill exercise. *Chest* 78 (July suppl):234-238, 1980.

Reduces angina attack frequency*

42% to 46% decrease reported in multicenter study.¹

Increases exercise tolerance*

In Bruce exercise test,² control patients averaged 8.0 minutes to onset of pain; Cardizem patients averaged 9.8 minutes ($P < .005$).

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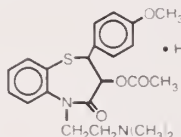
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PROFESSIONAL USE INFORMATION



DESCRIPTION

CARDIZEM (diltiazem hydrochloride) is a calcium ion influx inhibitor (slow channel blocker or calcium antagonist). Chemically, diltiazem hydrochloride is 1,5-Benzothiazepine-4(5H)-one, 3-(acetyloxy)-5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-(4-methoxyphenyl)-, monohydrochloride, (+) -cis-. The chemical structure is:



Diltiazem hydrochloride is a white to off-white crystalline powder with a bitter taste. It is soluble in water, methanol, and chloroform. It has a molecular weight of 450.98. Each tablet of CARDIZEM contains either 30 mg or 60 mg diltiazem hydrochloride for oral administration.

CLINICAL PHARMACOLOGY

The therapeutic benefits achieved with CARDIZEM are believed to be related to its ability to inhibit the influx of calcium ions during membrane depolarization of cardiac and vascular smooth muscle.

Mechanisms of Action. Although precise mechanisms of its antirhythmic actions are still being delineated, CARDIZEM is believed to act in the following ways:

1. Angina Due to Coronary Artery Spasm: CARDIZEM has been shown to be a potent dilator of coronary arteries both epicardial and subendocardial. Spontaneous and ergonovine-induced coronary artery spasm are inhibited by CARDIZEM.
2. Exertional Angina: CARDIZEM has been shown to produce increases in exercise tolerance, probably due to its ability to reduce myocardial oxygen demand. This is accomplished via reductions in heart rate and systemic blood pressure at submaximal and maximal exercise work loads.

In animal models, diltiazem interferes with the slow inward (depolarizing) current in excitable tissue. It causes excitation-contraction uncoupling in various myocardial tissues without changes in the configuration of the action potential. Diltiazem produces relaxation of coronary vascular smooth muscle and dilation of both large and small coronary arteries at drug levels which cause little or no negative inotropic effect. The resultant increases in coronary blood flow (epicardial and subendocardial) occur in ischemic and nonischemic models and are accompanied by dose-dependent decreases in systemic blood pressure and decreases in peripheral resistance.

Hemodynamic and Electrophysiologic Effects. Like other calcium antagonists, diltiazem decreases sinoatrial and atrioventricular conduction in isolated tissues and has a negative inotropic effect in isolated preparations. In the intact animal, prolongation of the AH interval can be seen at higher doses.

In man, diltiazem prevents spontaneous and ergonovine-provoked coronary artery spasm. It causes a decrease in peripheral vascular resistance and a modest fall in blood pressure and, in exercise tolerance studies in patients with ischemic heart disease, reduces the heart rate-blood pressure product for any given work load. Studies to date, primarily in patients with good ventricular function, have not revealed evidence of a negative inotropic effect; cardiac output, ejection fraction, and left ventricular end diastolic pressure have not been affected. There are as yet few data on the interaction of diltiazem and beta-blockers. Resting heart rate is usually unchanged or slightly reduced by diltiazem.

Intravenous diltiazem in doses of 20 mg prolongs AH conduction time and AV node functional and effective refractory periods approximately 20%. In a study involving single oral doses of 300 mg of CARDIZEM in six normal volunteers, the average maximum PR prolongation was 14% with no instances of greater than first-degree AV block. Diltiazem-associated prolongation of the AH interval is not more pronounced in patients with first-degree heart block. In patients with sick sinus syndrome, diltiazem significantly prolongs sinus cycle length (up to 50% in some cases).

Chronic oral administration of CARDIZEM in doses of up to 240 mg/day has resulted in small increases in PR interval, but has not usually produced abnormal prolongation. There were, however, three instances of second-degree AV block and one instance of third-degree AV block in a group of 959 chronically treated patients.

Pharmacokinetics and Metabolism. Diltiazem is absorbed from the tablet formulation to about 80% of a reference capsule and is subject to an extensive first-pass effect, giving an absolute bioavailability (compared to intravenous dosing) of about 40%. CARDIZEM undergoes extensive hepatic metabolism in which 2% to 4% of the unchanged drug appears in the urine. In vitro binding studies show CARDIZEM is 70% to 80% bound to plasma proteins. Competitive ligand binding studies have also shown CARDIZEM binding is not altered by therapeutic concentrations of digoxin, hydrochlorothiazide, phenylbutazone, propranolol, salicylic acid, or warfarin. Single oral doses of 30 to 120 mg of CARDIZEM result in detectable plasma levels within 30 to 60 minutes and peak plasma levels two to three hours after drug administration. The plasma elimination half-life following single or multiple drug administration is approximately 3.5 hours. Desacetyl diltiazem is also present in the plasma at levels of 10% to 20% of the parent drug and is 25% to 50% as potent a coronary vasodilator as diltiazem. Therapeutic blood levels of CARDIZEM appear to be in the range of 50 to 200 ng/ml. There is a departure from dose-linearity when single doses above 60 mg are given: a 120-mg dose gave blood levels three times that of the 60-mg dose. There is no information about the effect of renal or hepatic impairment on excretion or metabolism of diltiazem.

INDICATIONS AND USAGE

1. Angina Pectoris Due to Coronary Artery Spasm. CARDIZEM

is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).

2. Chronic Stable Angina (Classic Effort-Associated Angina). CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance. There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS AND ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM (See WARNINGS).

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in *in vitro* bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%),

headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System:	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGPT, SGPT, and LDH.
Dermatologic:	Puritus, petechiae, urticaria, photosensitivity.
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodic vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme, leukopenia, and extreme elevations of alkaline phosphatase, SGPT, LDH, and CPK. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CARDIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered:

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed high degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levaterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

The oral/LD₅₀'s in mice and rats range from 415 to 740 mg/kg, and from 560 to 810 mg/kg, respectively. The intravenous LD₅₀'s in these species were 60 and 38 mg/kg, respectively. The oral LD₅₀ in dogs is considered to be in excess of 50 mg/kg, while lethality has been seen in monkeys at 360 mg/kg. The toxic dose in man is not known, but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, before meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy**—CARDIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

Cardizem 30-mg tablets are supplied in bottles of 100 (NDC 0088-1771-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1771-49). Each green tablet is engraved with MARION on one side and 1771 engraved on the other. CARDIZEM 60-mg scored tablets are supplied in bottles of 100 (NDC 0088-1772-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1772-49). Each yellow tablet is engraved with MARION on one side and 1772 on the other.

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Oklahoma State Medical Association

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Sad Consensus

Unbelievably, there seems to be a consensus in my peer group. I have never known this to occur, and I am surprised that such a singular phenomenon has evolved. In my younger years, I worked with many of my colleagues to develop a consensus and to translate it into organized resistance; resistance against those who would capture the profession of medicine for purely political purposes. Needless to say, we failed.

Had we been less naive, we would have saved our energy. On the other hand, if we could have predicted the bedlam that has befallen our profession in the past twenty-five years, our efforts might have succeeded. But who would have believed such nonsense? Certainly no audience of rational, reasoning listeners.

The appearance of this consensus is, unfortunately, no cause for celebration. Instead, it is prologue to our epitaph. It is a prophecy of impending disaster. It is the death rattle of a once robust and proud profession.

Defined, the consensus is that we who entered medical school thirty or forty years ago feel fortunate that we are approaching the end of our professional careers and not the beginning.

So unanimous is this sentiment, I have heard not a single expression of disagreement. Neither have I heard an unhesitating affirmation from even one peer that he or she would today select the practice of medicine as a career.

I can only guess at the reasons for this apparently unanimous opinion. They are based in our experience and our knowledge. We know the sacrifices we made in training ourselves to be practicing physicians; sacrifices involving

hundreds of thousands of dollars and ten to fifteen prime years of our youth. We know what it is to work under unremitting stress for sixteen to twenty hours a day. We know the sacrifices our wives and children and families have made for us and will continue to make so long as we practice medicine.

At the same time, we know that today we are being told how, when, where, and with what we can treat patients. We know that lay bureaucrats rule us while only we are liable for the consequences of their rule. We know that our hospitals, our work places which we have struggled years to build and donated years of our time to support, are being forced into bankruptcy and closing their doors. We know that we are being enslaved. We know we are being blamed for the failure of a system we neither designed nor sponsored. We know we have been stripped of our professionalism. We know that we have become servants of an uncivil bureaucracy which pretends to represent the best interests of our patients.

These things we *know*. We do not have to argue their validity. We do not doubt their verity. We have been there. We are suffering through the humiliating denigration of a profession.

Imagine, if you can, the influence this consensus will have on those who have chosen to follow us; those bright, capable, ambitious and idealistic youngsters who are now engaged in the agonizing task of selecting their careers.

Indeed, it is a sad consensus. The magnitude of its significance is beyond exaggeration. It is ominous beyond description.

—MRJ

If I Were King

As "King James, the Just" of the USA, I would consider the following deeds appropriate:

- proclaim the Oklahoma Sooners and Oklahoma State Cowboys "America's co-Teams" replacing Tom Landry's Cowboys . . .
- maintain high standards of honesty, responsibility, fairness, clear thinking, and wise judgment among all members of Congress by rigid pre-election screening and post-election monitoring . . .
- unify all members of the medical profession into, again, a respected and beneficent force for the maintenance of the health of the people, in a clearly ethical climate of private practice uncluttered by regulations, their primacy of purpose unchallenged by limited licensed practitioners . . .
- simplify, streamline, and reform such institutions as DHHS and DHS of Oklahoma, cutting both red tape and top-heavy bureaucracy with one fell swoop, providing meaningful means - testing and discipline, with teeth, in determination of true need and, at the same time, speeding claims processing on judicious bases . . .



- integrate experienced, clinically oriented physicians back into medical education as well as provide good and timely instructions to medical students . . . on the perils of easily accessible chemicals and the avoidance of habituation . . . the accounting and business side of medical practice . . . how to handle patients with deviations of societal and/or sexual orientation . . . how to keep accurate, adequate, legible, and clearly-to-the-point records . . .
- educate Society to the individual importance of self-preservation, avoiding those fun, swinging things which add so greatly to costs of medical care while often tending to shorten productive lives . . .

Maybe someday these things will be achievable . . . but maybe not, anywhere short of Utopia!

Until that time, let us give thanks for the unique privilege we still enjoy of restoring health where possible, vigor and return to productive living in some instances, and the limited freedoms which remain in the practice of medicine.

William S. Weil, M.D.

Great appreciation to William S. Weil, MD, former president of Los Angeles County Medical Association (10,000 members strong), aka King William, the Wonderful, for permission to follow his "If I Were King" theme appearing several times in *LACMA*, the semimonthly journal of that association.

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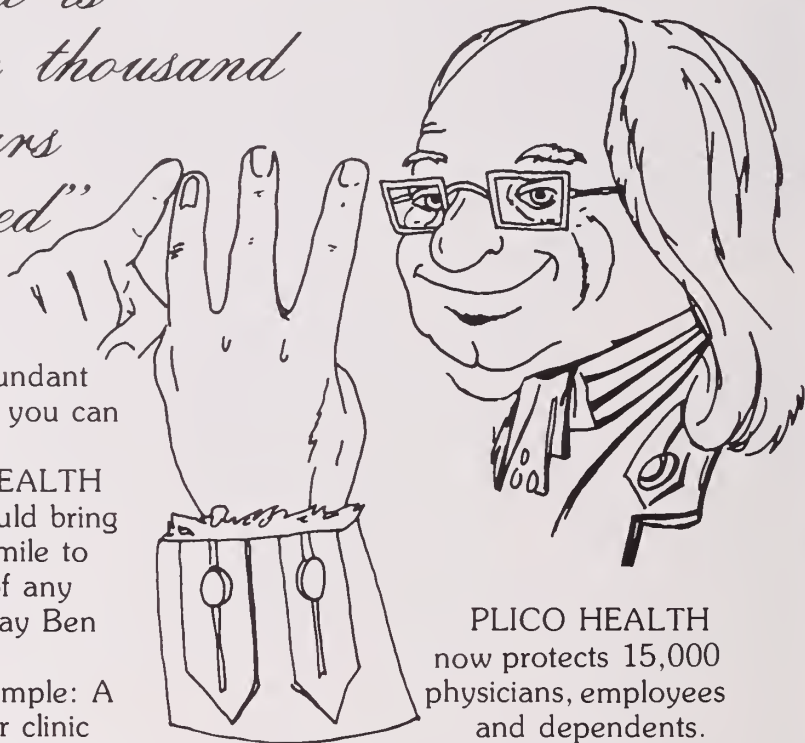
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Endoscopic Laser Therapy in the Palliative Treatment of Colorectal Carcinoma A Case Report

MARK H. MELLOW, MD
GRETCHEN A. McCOY, MD

In selected cases, palliation of colorectal cancers can be accomplished nonsurgically with the use of endoscopic laser therapy.

In the United States, carcinoma of the colon and rectum is currently the third most common tumor in men and the second most common in women. Despite advances in screening techniques (eg, stool hemoccult testing, air contrast barium enema, fiberoptic colonoscopy), a disappointing number of patients with colorectal carcinoma have disease which has spread beyond the confines of the colon at time of diagnosis. Approximately 35% of all patients coming to surgery are found to have disease spread to at least the regional lymph nodes. A sizable proportion of these patients have widespread intra-abdominal, hepatic, and/or pulmonary metastases; median survival from time of laparotomy is approximately 8 months.^{1,2} Local resection of the involved colon is still considered to be the treatment of choice in these patients.

The rationale for surgical treatment of the primary colonic lesion in far advanced disease includes: (1) relief and/or prevention of intraluminal obstruction; (2) prevention and/or treatment of bleeding; and (3) "de-bulking" of tumor mass. While the logic for palliative surgical treatment is sound, there are numerous drawbacks to the operative approach. Advanced age, coexistent medical conditions, and frequently poor nutritional status contribute to a relatively high morbidity and mortality for palliative surgery in many patients with far advanced colorectal disease. In addition, a sizable minority of patients who undergo surgical exploration with far advanced disease are found to be unresectable. In others, if resection is technically feasible, temporary or permanent colostomy is required.

The consequences of colostomy are often devastating, both to the patient and to his family. Until recently, there has been no acceptable alternative to operative management in the patient with far advanced colorectal carcinoma. Recently, it has been shown that vaporization of malignant tissue can be accomplished via laser energy applied through a fiberoptic endoscope. Success has been reported in establishing an adequate lumen in previously obstructed

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malignant lesions involving the esophagus, gastroesophageal junction, and, in a few cases, the colon.³⁻⁶ We report on a patient with far advanced colonic carcinoma who underwent successful palliative endoscopic laser therapy.

CASE REPORT

The patient is a 78-year-old white female referred to Presbyterian Hospital for evaluation of abdominal pain and a partially obstructing lesion of the sigmoid colon. The patient and family described increasing lower abdominal cramping pain over several months prior to admission. The pain was associated with audible bowel sounds and some abdominal distention, generally occurring after eating. She was initially noted to have guaiac positive stools and anemia, and barium enema revealed an "apple-core" lesion of the sigmoid colon with marked luminal narrowing.

Review of systems revealed history of hypertension, congestive heart failure, and moderate organic brain syndrome. Chest x-ray revealed the presence of multiple noncalcific pulmonary nodules, consistent with metastases. A liver-spleen scan likewise showed several large filling defects.

Flexible colonoscopic examination revealed a polypoid circumferential obstructing lesion at 20 centimeters from the anus. The lesion was very friable, and luminal obstruction was such that the pediatric-type colonoscope (diameter 10 mm) could not be passed initially. Biopsies obtained were positive for

the presence of adenocarcinoma. Laboratory data revealed a hemoglobin of 10.3, alkaline phosphatase elevation of 129 IU/L (normal < 90), LDH 222 IU/L. Pulmonary function studies revealed a decreased FEV-1.

While surgical palliative resection was initially considered, it became apparent that because of the patient's overall poor general health, apparent diffuse metastases, and moderate organic cerebral syndrome, an alternative to surgery, with its attendant morbidity and mortality, would be desirable. Endoscopic laser therapy was then undertaken. Standard colonoscopic preparation was utilized (liquid diet with nutritional supplements, laxatives, and cleansing enemas).

Laser treatment was performed with the Nd:YAG laser (Molelectron Medical), using a quartz waveguide, passed through the biopsy channel of a colonoscope (Olympus LB-3). Standard endoscopic premedication and standard endoscopic techniques were utilized. A laser beam was directed at the desired tissue site at a treatment distance of approximately 0.5 centimeters, utilizing a power output of 85 to 100 watts (Fig 1). Low coaxial carbon dioxide flow was utilized to cool the fiber tip, clear debris, and to assure a noncombustible ambient intracolonic atmosphere. The coaxial CO₂ was removed by means of a recirculation system attached to the suction channel of the colonoscope.

Treatment was initiated at the most proximally accessible area of tumor (ie, most distant from the anus) and was continued distally towards the anus at each session. Treatment was performed every other day (Monday, Wednesday, Friday). Treatment was continued until easy passage of the endoscope beyond the previous obstruction was possible.

Vaporization of the intraluminal tumor mass was accomplished with the use of the YAG laser in four treatment sessions, spanning a total of seven days. At the completion of treatment, the colonoscope was easily passed beyond the previously occluded colonic segment into the more proximal colon (Fig 2). The axial length of the tumor extended from 20 to 30 cm from the anus. At the completion of treatment, the patient was able to ingest a normal diet without abdominal symptoms and left the hospital for home.

Follow-up has been maintained for three months. On monthly endoscopic evaluation, her colonic lumen remains widely patent with no major increase in intraluminal tumor bulk or bleeding. She has maintained a normal hemoglobin, at 12.9 grams percent. We plan laser retreatment for the eventual expected intraluminal tumor recurrence.

DISCUSSION

This case illustrates the potential use of laser tissue vaporization in the nonoperative management of obstructing colorectal carcinoma in the patient with far advanced metastasis. In this case, the goals of surgical management, that is, relief of obstruction, prevention of bleeding, and primary tumor debulking, have been fulfilled with endoscopic laser treatment. Proce-



Fig 1. The laser fiber, encased in a quartz waveguide, is passed through the biopsy channel of a colonoscope. The fiber is positioned in direct proximity to the target tissue, so that energy may be delivered at a very localized area, thus diminishing the chance for damage to adjacent normal tissue.



Fig 2. Endoscopic photograph of the colonic lumen in our patient. On the Left, before treatment, showing almost total luminal occlusion; on Right, after completion of laser therapy, one week after start of treatment.

dure-associated morbidity in our patient was essentially no different from that of routine left-sided flexible colonoscopy. We used an Nd:YAG laser for tumor tissue vaporization. The YAG laser differs from the other medically available lasers (CO_2 , Argon) in that it has a considerably greater depth of tissue penetration. Therefore, it has the capacity to destroy more tumor tissue.

The use of endoscopic laser in the treatment of obstructing intraluminal gastrointestinal malignancies is new, and the experience, thus far, is quite limited. In 1982, Fleischer reported the first use of endoscopic YAG laser treatment for obstructing neoplasms of the esophagus and gastroesophageal junction in the United States.³ At the recent International Laser Congress of Surgery and Medicine, he reported his experience on the use of this palliative technique in 40 patients with far advanced esophageal and gastroesophageal malignancies.⁷ Mellow et al reported on their experience in a similar group of 24 patients.⁸ Endoscopic laser treatment was successful in rapidly establishing luminal patency in almost all patients. In addition, treatment could be repeated for

intraluminal tumor recurrence. Overall, morbidity was low. No patient developed signs of sepsis or bleeding. Esophageal perforation with resultant tracheoesophageal fistula has been the sole significant complication (8% of patients).

Although considerably less experience with the technique of laser treatment and obstructing colorectal carcinoma has been reported, the early results have been similarly encouraging. Clearly the use of endoscopic laser therapy is not innocuous. It requires an experienced operator as well as an experienced team of assistants trained in gastrointestinal study techniques.

At the present time, endoscopic laser treatment for colorectal carcinomas could be considered in the following clinical settings. First, as demonstrated in our patient with far advanced metastatic disease, intraluminal laser treatment might prove to be a preferable alternative to palliative operative management, as it may relieve obstruction and prevent bleeding without the attendant morbidity and mortality of laparotomy, resection, and/or colostomy. Sec-

ond, vaporization of an obstructing lesion might allow proper bowel preparation and sterilization, precluding the need for a two-stage operation with temporary colostomy.

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Toxic effects of OTC stimulants reported

Over-the-counter stimulants (decongestants, appetite suppressants, and so-called "legal stimulants") can produce toxic effects, according to Paul Pentel, MD, of the University of Minnesota School of Medicine in Minneapolis. Writing in the *Journal of the American Medical Association (JAMA)*, he says, "The most important toxic effect . . . is hypertension, which may result in hypertensive encephalopathy (headache, convulsions, coma) or intracerebral hemorrhage." Other effects include tachyarrhythmias, agitation, and seizures. Effects often result from overdose or drug interactions.

Haemophilus aphrophilus Endocarditis

TODD PRICE, MD
LARRY EDWARDS, MD

Haemophilus aphrophilus endocarditis has been associated with several predisposing factors including diabetes mellitus, as reported here.

H*aemophilus aphrophilus* endocarditis is rare. Factors which have been associated with *Haemophilus aphrophilus* endocarditis include periodontal disease and close association with pets. A high incidence of embolization with complicating brain abscesses has been described with this organism. Predisposing factors for *Haemophilus aphrophilus* endocarditis have included diabetes mellitus and pre-existing heart disease, although the organism has been reported to infect previously normal valves. We report a case of endocarditis due to *Haemophilus aphrophilus* in a Type II diabetic who had moderate periodontal disease, recent dental pain, bleeding gums, close association with four family pets, and no previous known heart murmurs. Echocardiography revealed late systolic mitral prolapse. Ampicillin sensitivity was variable as has been noted by others. Treatment consisted of moxalactam and tobramycin for six weeks and periodontal curettement.

Haemophilus endocarditis is rare, occurring in less than one percent of all reported cases of endocarditis. *Haemophilus aphrophilus* has been implicated in over sixty cases of endocarditis since first identified in 1940.¹

CASE REPORT

A 58-year-old man with no history of previous heart murmur and a ten-year history of diet-controlled diabetes mellitus presented with a two-and-one-half weeks history of general malaise. The onset of shaking chills, sweats, and headaches began two weeks prior to admission at which time his physician noted a Grade II/VI systolic murmur with temperature of 101.4 F. He was treated sequentially with a five-day course of erythromycin followed by five days of penicillin by his family physician after which time his symptoms recurred, and he was referred for consultation.

The patient was exposed to four family pet dogs, experienced bleeding of his gums when he brushed his teeth, and had no recent visits to a dentist. He had experienced intermittent diplopia for two weeks prior to admission.

Admitting examination revealed a toxic-appearing elderly white male undergoing a rigor with a temperature of 105.2 F, blood pressure 116/58mmHg, pulse 120 and regular, and respirations 14 per minute and regular. Significant abnormal physical findings included: moderate periodontal disease with edema, hyperemic interpapillary areas, moderate calculus deposition on the teeth and 2 to 4 mm pocketing, a black splinter hemorrhage was noted in the

nail bed of the right index finger, a Grade IV/VI holosystolic murmur with a decrescendo component at the apex, an abdominal aortic bruit, and a spleen percussible at the left costal margin with a palpable tip.

Laboratory results included: 10,500 WBC's with 79% segs, 16% bands, 3% lymphs, and 2% monos; hemoglobin 10.9 g/dl; hematocrit 29.9%, with normal indices; glucose 105 mg/dl; iron 14 mg/dl; alkaline phosphatase 148 u/l; sodium 137 mEq/l; potassium 4.6 mEq/l; chloride 99 mEq; CO₂ 24 mEq/l; urinalysis was within normal limits and erythrocyte sedimentation rate 116 mm/hr.

Computerized axial tomography of the brain was normal. M-mode and 2-D echocardiogram showed echoes on the anterior mitral leaflet compatible with vegetations, late systolic mitral prolapse, and left ventricular hypertrophy and dilatation (Figs 1 and 2).

A Gram's stain of dental plaque and gingival scrapings revealed WBC's with gram-negative pleomorphic rods, gram-positive cocci and gram-negative diplococci. Three *Haemophilus* strains were isolated on culture, all of which gave negative results to fermentations with dextrose, maltose, sucrose, and lactose; all required V factor and were sensitive to all tested antibiotics. One of four gingival and dental scrapings of the four family dogs grew a gram-negative rod, identified as *Haemophilus aphrophilus* by the criteria of Sutter and Finegold and the American Society of Microbiology.^{2,3} Urine cultures showed no growth at 48 hours. Five of five blood cultures grew gram-negative rods subsequently identified as *Haemophilus aphrophilus*. This organism was variably sensitive to ampicillin and was sensitive to moxalactam. Serum static and cidal levels and combination antibiotic studies could not be performed due to slow growth of the organism. Identification of the organism and its slow growth were confirmed by a reference laboratory at the University of Oklahoma.

DISCUSSION

Haemophilus aphrophilus is a gram negative, nonmotile, pleomorphic coccobacillus which produces filamentous and "bent" forms on subculture and is fastidious and slow growing as a rule. It grows best in 10% CO₂ and there is strain variability for X and V factors. It ferments glucose, sucrose, maltose, and lactose and is catalase and oxidase negative. In the present case, five of five blood cultures grew *Haemophilus aphrophilus* as did one mouth culture from one of the dogs. Root and coworkers isolated *Haemophilus aphrophilus* from dental scrapings of an endocarditis patient with periodontal disease.⁴ In the reported cases of *Haemophilus aphrophilus* endocarditis, eight patients had close association with dogs; of these, five pet dogs' oral mucosa were cultured, and three of them were positive for *Haemophilus aphrophilus*.⁵

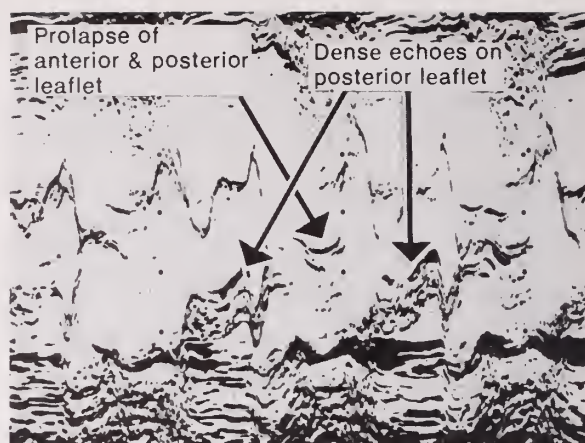


Fig 1.

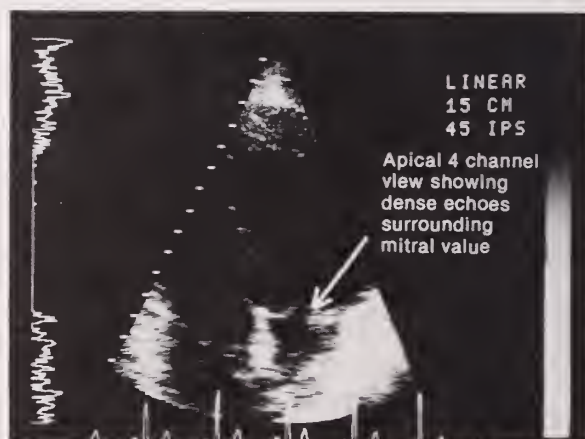


Fig 2.

Predisposing factors for *Haemophilus aphrophilus* endocarditis include chronic infections, pre-existing heart disease, malignancy, surgery, corticosteroid therapy and diabetes.⁶ Our patient had mitral valve prolapse and Type II diabetes controlled by diet for the previous 10 years, but exacerbated during the present infection.

Embolic phenomena with complicating brain abscesses continue to be a major complication of *Haemophilus* endocarditis.⁶ In a recent review of 24 cases of brain abscesses secondary to septic emboli with *Haemophilus aphrophilus* four occurred in documented endocarditis patients.⁶ Our patient's history of diplopia, in spite of a negative CAT scan of the brain, caused us to select an antibiotic that could cross the blood-brain barrier.

Because of variable sensitivity to ampicillin and his complaints of diplopia, we elected to treat him with moxalactam 2 gm IV every six hours for six weeks. In addition, tobramycin was added for possible synergism. Early in the course of treatment, he became hyperglycemic with blood glucose up to 395 mg% and required

up to 24 units of insulin per day, but as his treatment continued, he returned to euglycemia. This was associated with voluntary weight loss of 10 pounds. Periodontal curettment and dental cleaning was done early in the hospitalization under the same antibiotic coverage. Erythrocyte sedimentation rate on day 16 was 88 mm/hr and declined to normal by the 42nd day of hospitalization.

SUMMARY

A case of endocarditis due to *Haemophilus aphrophilus* in a Type II diabetic who had moderate periodontal disease, recent dental pain, bleeding gums, and close association with a pet dog from which the organism was grown from the mouth is reported. Echocardiography revealed a late systolic mitral valve prolapse as well as vegetations on the anterior mitral leaflet. Cure was obtained with six weeks' treatment with moxalactam and tobramycin. The patient is doing well two years after completion of treatment.

Acknowledgement

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Coming in December . . .

Papers scheduled for publication in the December issue of THE JOURNAL of the Oklahoma State Medical Association include reports on popliteal artery injury, the pharmacology of glucocorticoids, and the chronically mentally ill. Also scheduled is a special article about Sir Arthur Conan Doyle, the creator of Sherlock Holmes.

Appendicitis in Pregnancy

WILLIAM C. LINEAWEAVER, MD

Appendicitis, the most common surgical complication of pregnancy, must always be considered when evaluating abdominal symptoms in a pregnant patient.

Appendicitis in pregnancy should be considered with any increase in gastrointestinal symptoms or localization of abdominal pain. Minimal laboratory or radiologic studies are required. Prompt surgical exploration is indicated when appendicitis is suspected; morbidity with an inflamed or normal appendix is minimal, while perforated appendices are associated with a 36% rate of fetal loss and an occasional maternal death. Operative technique, antibiotic use, and anesthetic technique are minimally modified during pregnancy.

INTRODUCTION

When appendicitis occurs in pregnancy, it does not acquire any unusual characteristics of presentation or progression except for potential

changes in appendiceal position late in gestation. The clinical and laboratory findings of appendicitis must, however, be carefully distinguished from the physical and symptomatic overlays of pregnancy. I recently managed a female medical student who expertly performed this clinical exercise in evaluating the onset of abdominal pain during her own pregnancy.

CASE REPORT

The patient was a 25-year-old female senior medical student six weeks into her first pregnancy. She had had intermittent nausea during these six weeks, and had recently suffered an episode of gastroenteritis characterized by nausea, vomiting, diarrhea, and cramping abdominal pain. Twenty-four hours prior to admission, she noticed increased, persistent nausea and intermittent, dull periumbilical pain. The pain migrated to her right lower abdominal quadrant and became constant. She remained afebrile.

With the onset of constant pain, she went to the student infirmary and ordered a complete blood count and a urinalysis. Her urine was clear; her white blood count was 16,000 cells/mm³. She then contacted the obstetrician following her pregnancy, who examined her and found no uterine or adnexal abnormalities.

A surgeon was consulted, and his examination was positive only for marked, localized right lower quadrant abdominal pain. He concurred with the patient's diagnosis of appendicitis. After administration of two grams of intravenous cefoxitin and spinal

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anesthesia, an inflamed appendix was removed through a transverse (Fowler-Weir¹) right lower quadrant incision. Postoperative recovery was uncomplicated. The patient's pregnancy has now gone on to its third trimester without complication.

DISCUSSION

Incidence. Appendicitis is the commonest surgical emergency encountered in pregnancy. Hamlin et al found that appendicitis accounted for 40% of emergency explorations performed among 92,772 pregnancies in a 32-year period.² A cumulative review of 500,000 deliveries revealed an incidence of one case of appendicitis per 1,500 deliveries.³ This incidence of appendicitis is no different than in nonpregnant females of child-bearing age.^{4,5} Appendicitis appears in each trimester of pregnancy with similar frequency.³ Pregnancy, therefore, appears to have no direct influence on the occurrence of appendicitis.

Symptoms, signs, physical examination. Intermittent nausea, vomiting, and abdominal discomfort are common complaints found throughout pregnancy. An intensification of these symptoms, localization of abdominal pain, and/or temperature elevation should prompt a careful examination and consideration of appendicitis.

Almost all appendicitis in the first two trimesters produces abdominal pain that localizes to the lower right quadrant. Not until the third trimester does the often-discussed shift in localization occur coincident with physical displacement of the cecum.⁶ Even then, one-third of patients will still have lower right quadrant pain. The other two-thirds may have flank pain, upper right quadrant pain, or diffuse tenderness. Physical examination, including pelvic and rectal examination, should be directed toward precise location of the patient's tenderness and should specifically look for evidence of biliary tract disease, uterine and adnexal abnormalities, perirectal disease, and urinary tract disorders.

Laboratory evaluation. If symptoms and physical findings indicate appendicitis, minimal laboratory studies are required. X-rays of the abdomen and chest are not required unless specifically indicated, eg, if pneumonia is suspected. White blood counts, which can be normally as high as 13,000 cells/mm³ in pregnancy,³ are customarily obtained, but should be interpreted in the context of the patient's

physical findings: normal counts do not exclude significant infections. Catheterized urine should be examined for evidence of pyelonephritis, the most common disorder underlying negative appendectomies in pregnancy.³ Unless there are great numbers of white cells, however, pyelonephritis as a cause of significant abdominal pain should be considered only with caution.⁷ If the clinical findings suggest biliary disease or an adnexal mass, ultrasonography is a logical first resort because of its ability to delineate gallbladder abnormalities, ectopic pregnancies, or other pelvic lesions. Occasionally a fortuitous ultrasound examination can detect an inflamed appendix.⁸

Antibiotics. Preoperative, prophylactic antibiotics are not universally accepted as useful adjuncts to appendectomy; however, the widely reported 10% incidence of postappendectomy wound infection⁹ has led to prospective trials that have demonstrated decreased wound infection rates following preoperative administration of cefoxitin,¹⁰ cephaloridine,¹¹ gentamycin and clindamycin,¹² ampicillin and metronidazole,¹³ and intravenous¹⁴ and intrarectal¹⁵ metranidazole alone. Currently, aminoglycosides, tetracyclines, metronidazole, and sulfonamides are not recommended during pregnancy.¹⁶ Cefoxitin offers adequate coverage, documented clinical efficacy, and no contraindication in pregnancy; it therefore represents a rational choice for chemoprophylaxis in appendicitis during pregnancy.

Anesthesia. General anesthesia has not been found to contribute significantly to fetal loss or damage and should not be considered as contraindicated in pregnancy.¹⁷ If spinal anesthesia is elected, hypotension must be meticulously avoided, since hypotension represents a real fetal risk. The choice of anesthesia should be discussed in detail with the patient and the anesthesiologist. There is no evidence that spinal anesthesia is safer than general anesthesia for the pregnant woman or the fetus; therefore, spinal anesthesia should not be chosen if it compromises operative exposure or patient tolerance.

Operative technique. A transverse, muscle-splitting incision¹ made over the point of tenderness allows both best exposure of the appendix, wherever it may be, and ready medial and lateral extension if needed. This incision was

most frequently recommended in a survey of surgery residency programs.¹⁸

The technique of appendectomy is unchanged by the circumstances of pregnancy. In cases of gangrene or perforation, the appendix should be removed, a fascial closure performed, and the skin and subcutaneous tissue left open.

Complications. Fetal loss is directly related to the presence of peritonitis. In the large cumulative series of 333 cases of appendicitis previously cited,³ fetal loss among 263 women with nonperforated appendicitis was 1.5%, while 36.0% of 70 women with perforated appendices lost their babies. Three women in the second trimester of their pregnancies died of complications related to their appendiceal perforations. In contrast, fetal loss occurred in only 1 of 86 women undergoing appendectomy which revealed a normal appendix.

Wound complication rates following appendicitis are no different in pregnant women than in nonpregnant women.¹⁹ There are no studies describing the effects of perioperative antibiotics or any particular surgical technique.

Clearly, the risks of complications to the fetus and mother are a direct result of appendiceal perforation. The risks associated with a negative appendectomy are negligible. A presumptive diagnosis of appendicitis, made primarily on history, symptoms, and physical findings, should lead to a prompt exploration.

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I am at my desk, having just returned from seeing a patient . . .
who is alive and at the moment well because of the miracle
of medical progress. In recalling her happiness and the look
of gratitude she gave me, I cannot help reaching out in
appreciation to those persons, some known to me and many
unknown, whose efforts have permitted me this,
the supreme reward of the physician.

—Charles L. Hudson
Journal of Medical Education
40:35, 1965

Nutrition for the Practitioner V

Current Concepts in Nutrition: The Vitamin B Complex

STEPHEN R. NEWMARK, MD

The vitamin B complex is a group of six water-soluble vitamins whose deficiency can occasion such disorders as malabsorption states and alcoholism.

The vitamin B "complex" has been demonstrated to consist of at least six vitamins (thiamine, niacin, riboflavin, pyridoxine, biotin, and pantothenic acid) that are important in intermediary metabolism and whose deficiency produce characteristic signs and symptoms. Additional "B" vitamins such as vitamin B₁₂ and folic acid are described in a separate paper.

Because of the overlapping signs and symptoms produced by the deficiency of the individual components of the vitamin B complex, and because multiple vitamin deficiency states are usually observed as opposed to the deficiency of a single vitamin, we have outlined the salient features of the function, metabolism, and deficiency states of these vitamins. It is hoped that the recognition of these deficiency states, particularly in patients with chronic disease, decreased or restricted dietary intake, malabsorption states, protein-calorie malnutri-

tion, or unusual drug or alcohol intake will facilitate the diagnosis and treatment of these disorders.

FUNCTION OF B VITAMINS¹

Thiamine. Coenzyme in oxidative decarboxylation of alpha-keto acids to aldehydes (Coenzyme A). Coenzyme in transketolation reactions (generation of NADH). Important coenzyme in carbohydrate metabolism and Krebs cycle.

Niacin. Forms nicotinamide-adenine dinucleotide (NAD) and nicotinamide-adenine dinucleotide phosphate (NADPH). Important in electron transfer in intracellular respiratory cycles.

Riboflavin. Forms coenzyme flavin adenine dinucleotide (FAD) which is part of the electron transport cycle. It is a coenzyme in amino acid oxidases, xanthine oxidase, purine metabolism, oxidative phosphorylation, and fatty acid oxidation.

Pyridoxine. The vitamin acts as a coenzyme in synthesis and transfer reactions involving amino acids, of which the most important are aminotransferase, and transaminase; stabilizes

Southwestern Metabolism & Diabetes Center, Saint Francis Hospital, University of Oklahoma Tulsa Medical College, Tulsa, Oklahoma 74177.

Table 1. — "B" Vitamins

Vitamin	Sources					
	Grains	Fruit	Meat	Dairy	Vegetable	Other
Thiamine	E	G	F	P	G	Enriched wheat flour
Niacin	F	F	E	P	F	Tryptophan is converted to niacin
Riboflavin	P	P	P	E	E	Found in animal viscera
Pyridoxine	G	F	G	G	F	Wide spectrum of foods
Biotin	E	G	E	E	G	Intestinal bacteria synthesize biotin
Pantothenic Acid	G	G	E	E	G	Wide spectrum of foods

E-excellent; G-good; F-fair; P-poor

Table 2.—Recommended Daily Allowance^{2,3}

Vitamin	Men	Women	Pregnant Women	Lactating Women	Children	Infants
Thiamine	0.5 mg/ 1000 kcal	0.5 mg/ 1000 kcal	0.9 mg/ 1000 kcal	1.0 mg/ 1000 kcal	0.7-1.5 mg	0.3-0.5 mg
Niacin	16-18 mg	13-15 mg	15-17 mg	18-20 mg	9-16 mg	6.0 mg
Riboflavin	1.4-1.6 mg	1.2-1.3 mg	1.5-1.8 mg	1.7-1.8 mg	0.8-1.4 mg	0.4-0.6 mg
Pyridoxine	2.0 mg	2.0 mg	2.5 mg	2.5 mg	0.6-1.2 mg	0.3-0.4 mg
*Biotin	0.15-0.30 µg	0.15-0.30 µg				
*Pantothenic Acid	5-10 mg	5-10 mg				

*Food and Nutrition Board has suggested that these doses are adequate for adults and children.

Table 3. — Deficiency States³

Vitamin	Skin	Neuromuscular	Cardiac	Gastrointestinal	Other
Thiamine		Peripheral neuropathy, painful muscles, Wernicke's Encephalopathy (ophthalmoplegia, ataxia, nystagmus, coma), memory lapses, confabulation	High output heart failure	Anorexia, constipation	
Niacin	Dermatitis (body orifices, exposed surfaces) hands, forearms, neck, upper torso	Peripheral neuropathy, depression, delirium, dementia		Diarrhea, stomatitis	
Riboflavin	Seborrheic dermatitis (nose, scrotum)			Angular stomatitis, glossitis, cheilosis	Corneal vascularization, anemia
Pyridoxine	Seborrhea, intertrigo under breast and on moist skin areas	Anxiety, insomnia, weakness, peripheral neuropathy		Angular stomatitis, cheilosis, glossitis, nausea, vomiting	
Biotin	Seborrheic dermatitis	Muscle pain, paresthesias		Anorexia	
Pantothenic Acid		Paresthesias, muscle cramps, impaired coordination		Nausea, vomiting	

Table 4. — Laboratory Diagnosis of Deficiency⁴

Vitamin	Blood Level	Urine Level (24h)	Special Tests
Thiamine	<10 ng/ml	<65 µg/gm creatinine	Transketolase activity is decreased and is increased by thiamine administration > 20% above baseline.
Niacin	<2.8 µg/ml	<0.5 mg/g creatinine	
Riboflavin	<80 ng/ml	<70 µg/g creatinine	Decreased erythrocyte glutathione reductase (EGR) activity and decreased FAD activity is common. Riboflavin or FAD administration increases EGR activity > 1.4 times baseline activity.
Pyridoxine	<30 ng/ml		Erythrocyte glutamate-oxalacetate transaminase activity is decreased; tryptophan loading test (urinary excretion of xanthurenic acid 750 mg) after administration of tryptophan is diagnostic of pyridoxine deficiency.
Biotin	<10 ng/100 ml		
Pantothenic Acid	<100 µg/100 ml		

Table 5. — Treatment of Deficiency States

Vitamin	Oral	Parenteral
Thiamine	50 mg/day	50-100 mg IM for 5-10 days
Niacin	300-500 mg/day	100 mg IV per day for 5-10 days
Riboflavin	10-15 mg/day	10 mg IV per day for 5-10 days
Pyridoxine	30-50 mg/day	20-50 mg IV per day for 5-10 days
Biotin	0.20-0.60 mg/day	0.200 mg IV per day for 5-10 days
Pantothenic Acid	5-20 mg	20.0 mg IV per day for 5-10 days

Note: Except for malabsorption, treatment of deficiency states can be achieved using the oral route. Recommended parenteral doses of vitamins to be used in deficiency states have not been standardized.

phosphorylase during the breakdown of glycogen to glucose.

Biotin. Is an important coenzyme in the intermediary metabolism of carbohydrates, proteins, and fats. Specific coenzymes are pyruvate carboxylase, propionyl CoA-carboxylase, acetyl-CoA carboxylase; may activate folic acid in folate-requiring reactions.

Pantothenic Acid. Forms part of coenzyme A which is involved in virtually all energy-requiring reactions in intermediary metabolism.

CLINICAL CONDITIONS ASSOCIATED WITH DEFICIENT VITAMIN B COMPONENTS

Thiamine. Carbohydrate increases the metabolism of thiamine and may precipitate a deficiency state if the prior thiamine tissue level was borderline. Alcoholism has been associated with acute thiamine deficiency.

Niacin. INH may impair the conversion of tryptophan into niacin. In the carcinoid syn-

drome, tryptophan is diverted into serotonin products, thus decreasing niacin synthesis.

Riboflavin. Hepatic disease and biliary tract disease reduce gut absorption. Deficiency has been noted in states of rapid growth or stress.

Pyridoxine. Isoniazid (INH), hydralazine, and cycloserine affect absorption and metabolism. Pregnancy or estrogen therapy increases the need for pyridoxine.

Biotin. Raw egg white contains a glucoprotein, avidin, which binds biotin in the gut.

Pantothenic Acid. No known drug inhibits or antagonizes the biological activity.

USES OF PHARMACOLOGICAL (SUPRA REPLACEMENT) DOSES OF VITAMIN B SERIES

Thiamine. There are no known uses for pharmacological doses of thiamine other than treatment for thiamine deficiency states. Toxicity states are unknown.

Niacin. Large doses of niacin (100 mg-4000 mg) have been used to promote vasodilation and for decreasing cholesterol and triglyceride levels.

Toxicity states consist of headache, warmth or flushing, and hepatic cholestasis. Large doses may impair glucose tolerance by a direct effect on islet cells.

Riboflavin. There are no known uses for pharmacological doses of riboflavin other than treatment of riboflavin deficiency states. Toxicity states are unknown.

Pyridoxine. Supplementation of diet with 30 mg of pyridoxine normalizes tryptophan metabolism in patients taking INH and who are pregnant or taking oral contraceptives. Additional supplementation may be required in patients taking penicillamine.

A group of pyridoxine-responsive diseases are known to respond to pharmacological doses of the vitamin. It must be emphasized that these diseases are not deficiency states but represent an altered stability of the vitamin as a coen-

zyme. According to a recent report, pharmacological doses of pyridoxine may cause peripheral neuropathy.

Biotin. There are no known pharmacological uses for biotin. Toxicity states have not been proven, although peripheral neuropathy has been associated with a small number of patients taking extremely high doses of biotin (> 1-10 mg per day).

Pantothenic Acid. There are no known pharmacological uses for pantothenic acid. Toxicity states are unknown.

USE OF PYRIDOXINE

Cystathione B-synthase deficiency. "Stabilizes" mutant enzyme.

Cystathionuria. Large doses of pyridoxine allow interaction with mutant coenzyme.

Glutamic Acid Decarboxylase deficiency. Decreases binding to pyridoxine. Increased pyridoxine restores cofactor activity and allows normal levels of gamma-amino butyric acid.

Sideroblastic anemia. Abnormal aminolevulinic acid synthetase blocks production of heme. Administration of large doses of pyridoxine (1000-2000 mg) may induce a remission.

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News from the Oklahoma State Department of Health

Kindergarten Immunization Survey—Oklahoma, 1983-84

Each year, the Oklahoma State Department of Education and the Oklahoma State Department of Health conduct a survey of immunization levels among kindergartners in all public, private, and parochial schools. As of January 31, 1984, the Immunization Division had received a completed survey

response from each of the 1,081 kindergartens with a total enrollment of 48,152.

Oklahoma's 1983-84 kindergarten class was highly immunized prior to school entry. Of the 48,152 enrollees, 46,862 (97.3%) met minimum immunization requirements while 1,010 (2.1%) had records that showed they lacked one or more doses of the required vaccines. Only 40 children (0.1%) were admitted without records, attesting to the vigor and enthusiasm with which school officials responded to the school immunization law and the abolishment of the grace period. An additional 240 (0.5%) were enrolled with exemptions.

When compared to the 1982-83 survey data, these results represent a 1.6% increase in overall kindergarten immunity levels. These excellent levels of protection are the result of combined efforts of private physicians, schools, county health departments, and the Oklahoma State Department of Health. As a result, schools have been virtually eliminated as a source of spread for those diseases preventable by immunizations.

The following table summarizes immunity levels among kindergartners from the 1983-84 survey.

**Immunization Levels* of Kindergartners
By Region, By Vaccine, and Totals,
Oklahoma, 1983-84**

Region	DTP	Polio	Measles	Rubella	All Antigens
Northeast	98.2	98.0	99.0	99.0	97.5
Northwest	97.9	97.3	99.0	98.9	96.8
Southeast	98.3	98.2	98.7	98.7	97.5
Southwest	98.6	98.2	99.1	99.1	97.7
Totals	98.2	97.9	99.1	99.1	97.3

*Defined as: 3 or more doses DTP vaccine, 3 or more doses polio vaccine and one dose each measles and rubella vaccines administered after age one.

DISEASE	August 1984	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	6	8	17
CAMPYLOBACTER INFECTIONS	8	128	141	—
ENCEPHALITIS, INFECTIOUS	1	15	29	20
GIARDIA INFECTIONS	34	137	141	—
GONORRHEA (Use ODH Form 228)	1477	8614	10484	12399
HAEMOPHILUS INFLUENZAE INVASIVE DISEASE	13	129	99	—
HEPATITIS A	48	297	339	267
HEPATITIS B	16	144	218	153
HEPATITIS, NON-A-NON-B	1	30	33	—
HEPATITIS UNSPECIFIED	4	72	130	128
MEASLES (RUBEOLA)	0	8	1	140
MENINGITIS, ASEPTIC	9	48	265	103
MENINGITIS, BACTERIAL (non-meningococcal, non H. Influenzae)	4	34	55	34
MENINGOCOCCAL INFECTIONS	0	22	25	22
PERTUSSIS	4	210	205	52
RABIES (Animal)	9	84	90	151
ROCKY MOUNTAIN SPOTTED FEVER	0	88	189	89
RUBELLA	0	0	0	2
SALMONELLA INFECTIONS	26	251	340	235
SHIGELLA INFECTIONS	14	124	136	153
SYPHILIS (Use ODH Form 228)	18	130	160	107
TETANUS	0	0	0	0
TUBERCULOSIS	3	141	165	209
TULAREMIA	3	16	22	17
TYPHOID FEVER	0	2	3	0

Diseases of Low Frequency	Total to Date This Year
ACQUIRED IMMUNE DEFICIENCY SYNDROME	6
BRUCELLOSIS	4
LEGIONNAIRES DISEASE	15
MALARIA	8
REYE'S SYNDROME	14
TOXIC SHOCK SYNDROME	10
RABIES	
BECKHAM	SKUNK 1
KAY	SKUNK 1
KIOWA	CAT 1
PAYNE	BAT 1
POTTAWATOMIE	SKUNK 1
ROGERS	BAT 1
TILLMAN	SKUNK 2
WAGONER	SKUNK 1

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Oklahoma makes top ten in race for doctors

In a comparison of physician population growth in various states between 1980 and 1983, Oklahoma and Utah were tied for seventh place with increases of 14.1% each.

The ten states with the largest percentages of growth during that period were Nevada (23.7%), Wyoming (20.1%), Alaska (17.1%), Florida (16.3%), Delaware (15.5%), Texas (15.1%), Oklahoma (14.1%), Utah (14.1%), Arizona (13.9%), and New Hampshire (13.8%).

Only the District of Columbia had a physician population decline during the same period (-2.2%).

These figures were among the preliminary data on the physician population of the United States for 1983 recently released by the American Medical Association (AMA).

The total number of physicians in this country increased by 17,455 — from 501,958 in 1982 to 519,403 in 1983, an increase of 3.8%. The number of physicians whose primary activity is patient care increased from 408,663 to 423,310, or 3.6%.

Women entered the profession in increasing numbers, from 62,247 in 1982 to 69,421 in 1983, or an 11.5% jump in just one year. While the total number of physicians increased 11.1% since 1980, the total of women physicians grew by 27.9%.

The number of graduates of foreign medical schools, including both foreign nationals and US citizens who were graduated by foreign schools, grew by 3.6% — from 107,284 in 1982 to 111,161 in 1983.

The ratio of physicians per 100,000 civilian population has increased dramatically in recent years, reaching 212 per 100,000 in 1983. Comparable figures for other years are 148 in 1970, 169 in 1975, and 195 in 1980.

Physicians in other professional activities, including teaching, administration, and research, increased from 40,726 in 1982 to 44,286 in 1983, a growth of 8.7%.

As it has for several years, the field of internal medicine attracted the most physicians, 82,624. General surgery, with 36,446 physicians, was the second largest specialty field, followed by family practice (35,977), pediatrics (32,797), psychiatry (30,803), obstetrics-gynecology (29,332), general practice (28,594), anesthesiology (19,450), orthopedic surgery (15,911), and pathology (14,892). □

Cable TV burgeoning source of medical education, news

The American Medical Association's new medical cable television programming, called "Med-Video Clinic," is now reaching physicians across the country, according to James H. Sammons, MD, AMA executive vice-president. And cable networks promise even more in 1985.

"Med-Video Clinic" is a weekly series of one-hour programs on the Lifetime and USA cable networks providing continuing medical education (CME) for physicians on a variety of

Smoking indicted again: impairs facelift healing

There is a direct association between cigarette smoking and a patient's ability to heal following a facelift, according to Thomas D. Rees, MD, a plastic surgeon affiliated with the Manhattan Eye, Ear, and Throat Hospital.

Patients who smoke are twelve and a half times more likely to develop skin slough than patients who do not smoke, Rees says. Skin slough is the shedding of tissue which dies when an adequate blood supply fails to reach the skin, and it results in delayed healing and more noticeable scar formation.

To confirm his long-held suspicion that smoking affects healing, Rees reviewed the records of 1,186 patients who had undergone facelift surgery from 1975 through 1981. One hundred twenty-one patients had evidence of skin slough. Rees was able to contact 91 of these patients and, based on the responses about their smoking habits, determined that 74% of the skin sloughs observed were due to smoking.

"Because nicotine constricts blood vessels, its impact on healing is compounded in surgery where the blood supply to facial skin is already temporarily reduced," he said. "This finding may be of some comfort to surgeons whose patients experience skin slough, because the condition can be blamed — to some extent, at least — on the patient's smoking habits."

As a result of his findings, Rees now accepts for facelift surgery only those patients who agree to stop smoking ten days prior to surgery and abstain for three weeks after. "Because an appreciable part of every surgeon's practice consists of smokers," he cautions, "the implications of this study, in terms of patient selection and preoperative counseling, seem considerable."

"Heavy smokers can reasonably be denied elective aesthetic surgery unless they stop," he concludes. "Perhaps a suitable admonition to the smoking patient would be 'Warning — smoking can be hazardous to your facelift.'" □

Cable TV (continued)

clinical topics, including evaluation of breast disease, obesity, headache, hearing loss, hypertension, and asthma. Each show reviews the physiology, etiology, diagnosis, and treatment of the condition as well as the prognoses for patients.

The AMA's Continuing Medical Education Advisory Committee has evaluated each program for clinical relevance and accuracy. Each also carries Category I credit toward the AMA's Physician Recognition Award, which physicians may receive after documenting 150 hours of CME credit over a three-year period.

"The Association has long understood the profession's demand and need for information to keep physicians updated on developments in medicine," Sammons says. The cable television format "enables the AMA to provide this timely and needed CME material in a new and convenient way," he adds.

The AMA estimates that more than 230,000 physicians can be reached by the Lifetime and USA cable networks. A recent independent survey for the AMA found that many physicians tape the programs for future viewing and/or viewing in groups at their hospitals. Satisfaction with the quality and immediate usefulness of the information offered was evident from the survey results.

AMA study guides to accompany "Med-Video Clinic" are available to physicians on request for \$5 each to cover printing, postage, and handling costs. The toll-free telephone number for ordering the guides is 1-800-972-1000.

In a related story, the Lifetime cable network has announced that, beginning in January 1985, its entire Sunday schedule will be devoted exclusively to medical programming for physicians and health care professionals. Titled "Doctors' Sunday," the 24-hour period from 6 AM Sunday to 6 AM Monday (EST) will contain all of Lifetime's Medical Television Series' programs.

"Doctors' Sunday" will be divided into four-hour blocks of regularly scheduled programs that will periodically recycle.

Programs planned for "Doctors' Sunday" include Lifetime's longest running medical series, "Physicians' Journal Update." Another Lifetime program that will move to "Doctors' Sunday" is the educational and interactive "Video Seminar" series.

Two new series will be "Specialty Updates" and "Convention Highlights."

Lifetime's "INFORMATHON" series of multihour, live specials devoted to single health issues will also be part of "Doctors' Sunday" on a frequent basis. □



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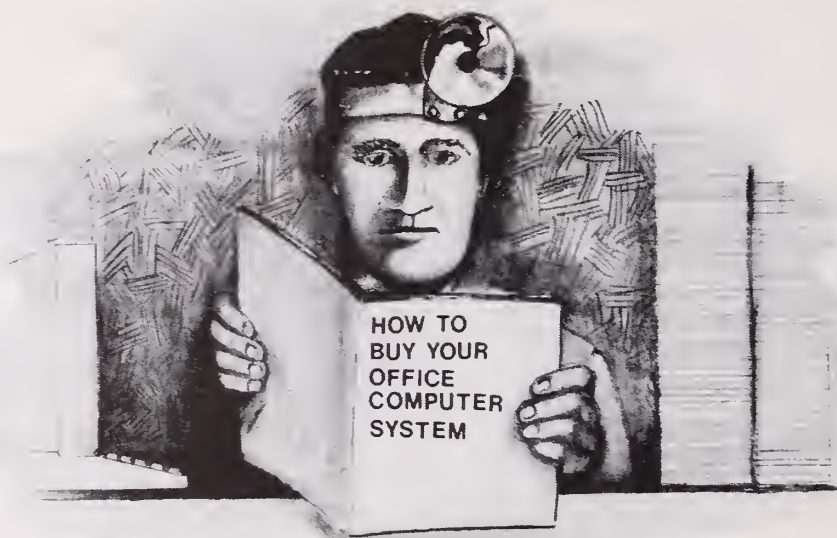
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Extension of drug patents gets congressional okay

The US Senate, by voice vote on September 12, passed and sent to President Reagan S 1538, the Drug Price Competition and Patent Term Restoration Act of 1984. The House, by a vote of 362-0, had approved the bill on September 6.

The legislation will extend the patent term of brand-name drugs for up to five years (with a patent life cap of 14 years) to compensate manufacturers for the time required to conduct product testing and to secure Food and Drug Administration (FDA) approval of the drug. This provision of the bill is intended to provide new incentives for brand-name pharmaceutical manufacturers to increase their expenditures for research and development.

Concern has been expressed in recent years that the reduced time period during which a drug product is marketed under patent protection (a reduction caused by FDA regulatory requirements) has resulted in fewer new drug products being introduced in the United States.

The bill will also permit drug manufacturers to use an abbreviated new drug application

(ANDA) for approval of generic versions of brand-name drugs approved after 1962. Currently, the FDA can require the manufacturers of generic copies of drugs approved after 1962 to conduct additional clinical tests even though the FDA has already determined that the brand-name drug is safe and effective. This provision of the bill is expected to result in reduced drug costs due to the greater availability of cheaper generic drugs. □

Microwave zaps trichina when proper method used

Bag it. That's the new, simple answer to the question of how to cook pork safely in a microwave oven, reports Dr Richard Greenberg, associate director of the American Council on Science and Health (ACSH), in the September/October issue of *ACSH News & Views*.

"You can cook pork safely in a microwave oven if you follow the manufacturers' or recipe instructions *and* take the additional step of

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cooking the meat inside a sealed plastic bag," Greenberg said. "When this procedure is used, all parts of the meat including the surface will attain temperatures high enough to kill the trichina parasite — the organism that causes trichinosis."

Concern about microwaved pork arose in 1982, when Iowa State University researchers discovered that trichinae could sometimes survive in pork that had been cooked in a microwave oven, even when the meat had been prepared according to procedures "generally recommended by the oven manufacturers or the Pork Producers Council."

The plastic bag procedure works by preventing surface evaporation from the meat during cooking. Surface evaporation, researchers discovered, was cooling the outside surfaces of the meat so much that even when the inner portions had reached a temperature much higher than

that needed to kill trichinae, the outside surfaces were still cool enough to allow the parasites to survive.

When pork is microwave-cooked in a plastic bag, the bag holds in the moisture produced during cooking. The atmosphere around the meat quickly becomes saturated. This prevents surface evaporation and the surface cooling that would result from it.

"Tests have shown that pork roasts microwave-cooked in bags reached surface temperatures that exceeded by a safe margin the minimum temperature necessary to ensure the destruction of trichinae," Greenberg reported. □

Deaths

KIRK T. MOSLEY, JR, MD
1932 - 1984

Kirk T. Mosley, Jr, MD, of Shawnee, died August 26 in a Eufaula hospital. Dr Mosley, a general practitioner, earned his medical degree from the University of Oklahoma College of Medicine in 1965 and established a private practice in Prague. Ten years later he moved his practice to Shawnee. Dr Mosley was a veteran of the Korean conflict.

INGVALD JOHN HAUGEN, MD
1897 - 1984

OSMA Life Member I.J. Haugen, MD, a general practitioner in Ada for many years, died at his home September 1 following an extended illness. Dr Haugen, a 1932 graduate of Rush Medical College in Chicago, moved to Oklahoma from Amarillo, Texas, in 1946.

HUGH H. MONROE, MD
1896 - 1964

Hugh H. Monroe, MD, retired Pauls Valley anesthesiologist, died September 9 in Pauls Valley. Born near Ranger, Texas, Monroe served as a private in the US Army during World War I. He earned his MD degree at Vanderbilt University School of Medicine, Nashville, Tenn, and became a member of the Oklahoma State Medical Association's Fifty Year Club in 1971.

In Memoriam

1983

<i>Marque O. Nelson, MD</i>	<i>December 24</i>
<i>Park H. Medearis, MD</i>	<i>December 26</i>
<i>Charles S. Beaty, MD</i>	<i>December 28</i>

1984

<i>Jack H. Foertsch, MD</i>	<i>January 19</i>
<i>Thomas L. Ozment, MD</i>	<i>February 11</i>
<i>Thomas L. Foster, MD</i>	<i>February 25</i>
<i>Robert W. Lowrey, MD</i>	<i>February 27</i>
<i>Ella Mary George, MD</i>	<i>March 1</i>
<i>Kemper C. Lain, MD</i>	<i>March 8</i>
<i>William R. Cheatwood, MD</i>	<i>March 12</i>
<i>William A. Dean</i>	<i>March 19</i>
<i>Charles H. Cooke, MD</i>	<i>March 23</i>
<i>Donald J. Worden, MD</i>	<i>April 1</i>
<i>William I. Jones, MD</i>	<i>April 3</i>
<i>Paul Kernek, MD</i>	<i>May 9</i>
<i>Leon C. Freed, MD</i>	<i>June 12</i>
<i>William D. Bolene, MD</i>	<i>June 18</i>
<i>Lee K. Emenhiser, MD</i>	<i>June 26</i>
<i>Grace C. Hassler, MD</i>	<i>July 14</i>
<i>Carryl W. Wiggins, MD</i>	<i>July 17</i>
<i>Solomon Papper, MD</i>	<i>August 19</i>
<i>Kirk T. Mosley, Jr, MD</i>	<i>August 26</i>
<i>Ingvald John Haugen, MD</i>	<i>September 1</i>
<i>Hugh H. Monroe, MD</i>	<i>September 9</i>

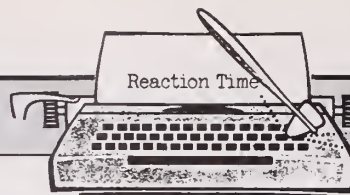
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Mobile testing urged

To the editor — The enclosed salute of the OK division of the Cancer Society [Roche Products, Inc., advertisement, "Putting the Pap test on wheels," p ii] was much appreciated. I wondered if screening programs in areas such as breast cancer were being considered. A bus such as helped deliver Oklahomans from the tragedy of cervical cancer may well serve the public in mass xeromammograms. One of my most helpless moments as a physician is when I face the reality of a patient who needs help, but they or I cannot come up with the resources to obtain needed testing. We plan to have a Health Fair in Nowata in two months. We have tried to go down the list of causes of death to provide preventive care to our citizens who will visit the Health Fair, but we draw a blank on breast cancer (after tapes and demonstration of breast

self exam). A mobile xeromammogram for such fairs would be a great help in early detection of such cancers before they can be felt or especially in those who will not use BSE. Cost-to-benefit ratios are "the standard" for the utility of the screening exam, but with donated time, volunteer services, and possibly donated equipment, the cost would be negligible and the benefit enormous. I do not wish this project to compete with present facilities. Hopefully it will reach the millions of women who have a need for screening (according to ACS guidelines), but who will get breast cancer before they can be screened, at present rates.

Thank you for your time and article,
Robert C. Bowman, MD

P.S. Suggestions as to who to contact: corporations, physicians' societies, volunteers, etc., would be much appreciated.

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Book Reviews

Tumors of the Head and Neck: Clinical and Pathological Considerations. Second edition, by John G. Batsakis, MD. Baltimore: Williams and Wilkins, 1979, pp 573, price \$59.00.

The first edition of this book appeared in 1974 and was highly touted by clinicians and pathologists having a special interest in diagnosis and management of patients with head and neck tumors. In this revised edition, Dr Batsakis has completely updated every chapter and added four new ones. The four new chapters are, "Cysts, Sinuses and 'Coeles'"; "Wegener's Granulomatosis and Midline (Nonhealing) 'Granuloma'"; "Immunological Considerations in Head and Neck Cancer"; and "Odontogenic Lesions — Tumors and Cysts." Though the book's main emphasis is head and neck neoplasms, non-neoplastic disorders which mimic them are also considered. Each disease process is thoroughly discussed in relation to its histogenesis, classification, clinical presentation, behavior, etiology, histopathology, staging, treatment and prognosis. The book contains 27 chapters.

Four of the most in-depth chapters deal with salivary gland neoplasms and fibrous lesions of the head and neck — benign, malignant, and indeterminate. Whether one agrees or disagrees with the author's hypotheses on histogenesis and classification of fibrous and salivary gland lesions, one must be impressed with the extensive research and thought given to those areas.

The book contains many photographs which are of excellent quality. A few clinical

and gross specimen photographs are included, but the majority are photomicrographs. A few electron photomicrographs are also included. Though written by a pathologist, the book is more than a collection of photomicrographs and histologic descriptions, and the nonpathologist should find this book just as useful as does the pathologist. Dr Batsakis is to be commended for this excellent text; it is a must for all those who seek an up-to-date clinicopathologic correlation of tumors in the head and neck.

*Stephen Kent Young, DDS, MS
Associate Professor of Oral Pathology
Associate Professor of Pathology
Colleges of Dentistry and Medicine
University of Oklahoma*

Cardiology for the House Officer. By Joel W. Heger, MD; James T. Niemann, MD; Keith G. Bowman, MD; and Michael Criley, MD. Baltimore: Williams and Wilkins, 1982. Pp 288, illust, \$9.95.

This handbook originated as a loose-leaf text for the house officers and cardiology fellows at the Harbor — UCLA Medical Center where the authors have been, or are, members of the Cardiology Division. This is an easily used handbook, conveniently divided into 19 chapters ranging from basic electrocardiography in the first chapter to cardiac surgery in the nineteenth chapter. There is the usual dogmatism incumbent upon the handbook format, but good use is made of references which follow each chapter for those interested in more detailed information. While the indexing leaves

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Book Reviews (continued)

something to be desired, the format in each chapter is convenient enough to preclude the need for better.

It would be unwise in this forum to "pick apart" the book for its shortcomings, though certain of these should be pointed out. Two-dimensional echocardiography is, in my opinion, inadequately discussed, and there is no mention of some of the newer ultrasound techniques such as Doppler. While the discussion of nuclear cardiology is concise, there seems to be an under-discussion of application of these techniques in disease states. In the treatment of coronary disease, more discussion of the newer techniques — such as percutaneous transluminal coronary angioplasty and, also, streptokinase infusion during acute myocardial infarction — would seem appropriate. Other shortcomings relate to the lack of discussion of

the role of electrophysiological studies in the diagnosis and management of patients with cardiac arrhythmias. Additionally, the coverage of the topic of cardiac pacemakers is superficial.

On the other hand, this book has very definite strengths. For example, the discussions in basic electrocardiography and chest roentgenography are excellent, as are the sections of M-mode echocardiography and coronary disease risk factors.

Overall, I would recommend this text as a starting point for a house officer beginning a cardiology rotation or as a quick reference for a house officer on a busy medical rotation. If this text could be updated periodically, with the updates quickly brought to press, it would be a potentially very useful handbook for medical house officers early in their training.

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Department of Medicine

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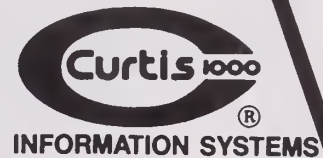
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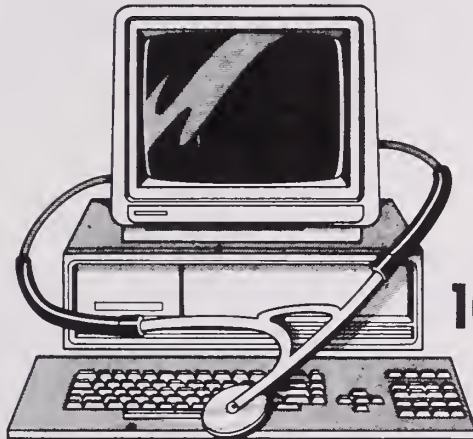
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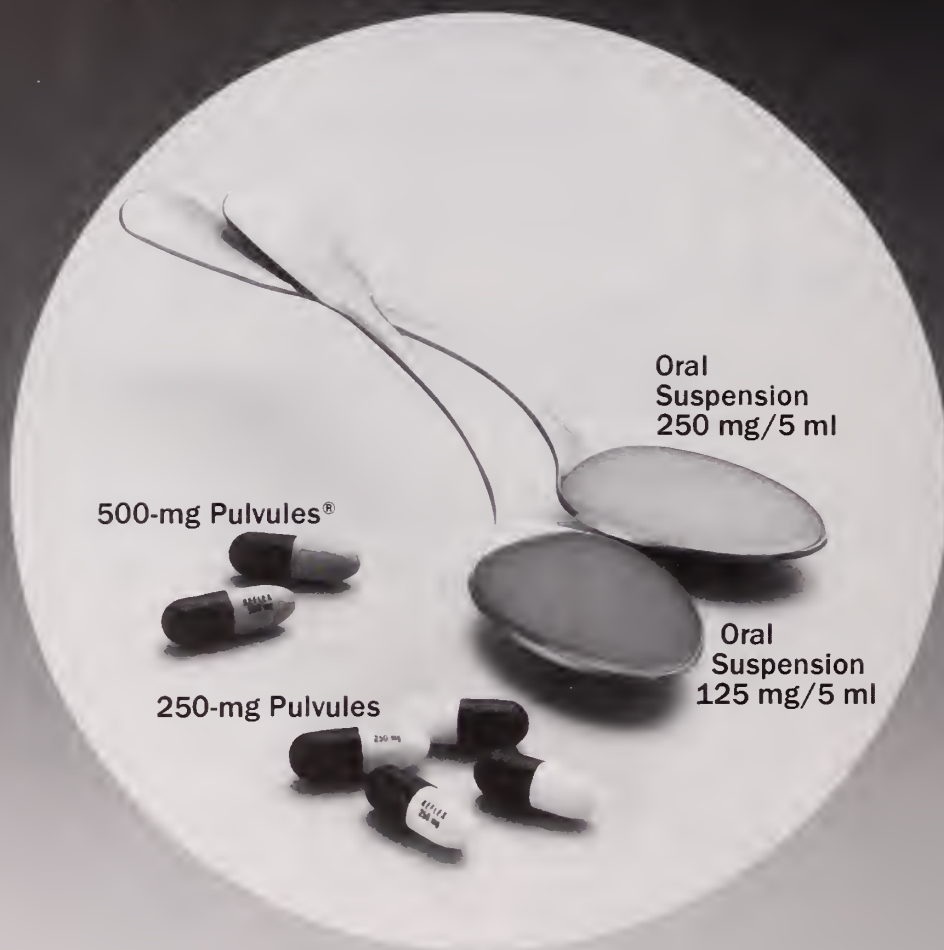
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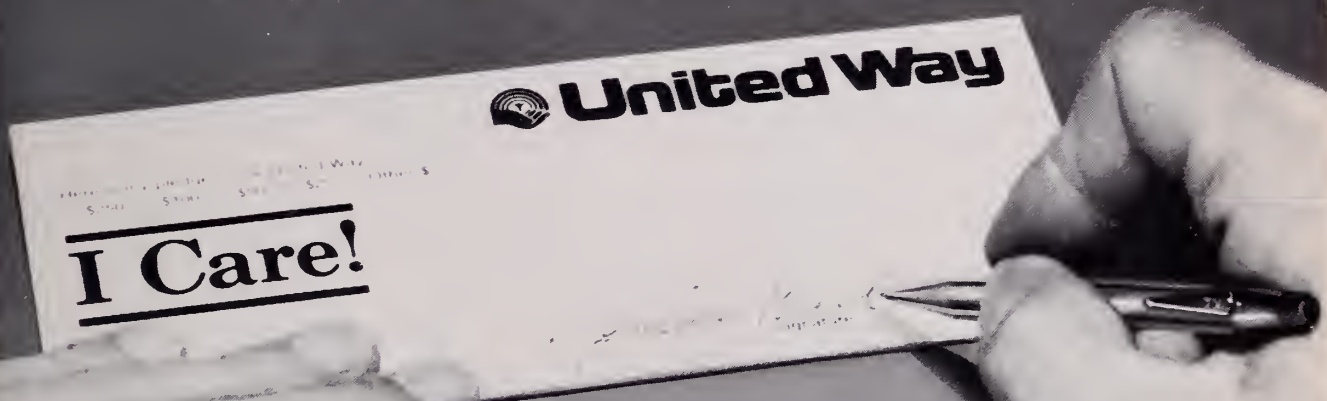
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Precautions: ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, patients should be monitored closely. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function or in patients who have also recently received methyldopa. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patient carefully monitored. ISOPTIN may have an additive hypotensive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. **Pregnancy Category C:** There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use.

Adverse Reactions: Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR<50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%). The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: confusion, paresthesia, insomnia, somnolence, equilibrium disorders, blurred vision, syncope, muscle cramps, shakiness, claudication, hair loss, maculae, and spotty menstruation. Overall continuation rate of 94.5% in 1,166 patients.

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Motrin Tablets can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, skin rash, weight gain, or edema.

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As with other nonsteroidal anti-inflammatory drugs, borderline elevations of liver tests may occur in up to 15% of patients. These abnormalities may progress, may remain essentially unchanged, or may be transient with continued therapy. Meaningful elevations of SGPT or SGOT (AST) occurred in controlled clinical trials in less than 1% of patients. Severe hepatic reactions, including jaundice and cases of fatal hepatitis, have been reported with ibuprofen as with other nonsteroidal anti-inflammatory drugs. If liver disease develops or if systemic manifestations occur (e.g. eosinophilia, rash, etc.), Motrin should be discontinued.

Drug interactions. Aspirin: used concomitantly may decrease Motrin blood levels.

Coumarin: bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions: The most frequent type of adverse reaction occurring with Motrin is gastrointestinal of which one or more occurred in 4% to 16% of the patients.

Incidence Greater than 1% (but less than 3%)—Probable Causal Relationship

Gastrointestinal: Nausea,* epigastric pain,* heartburn,* diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). **Central Nervous System:** Dizziness,* headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic/Endocrine:** Decreased appetite. **Cardiovascular:** Edema, fluid retention (generally responds promptly to drug discontinuation, see PRECAUTIONS).

Incidence less than 1%—Probable Causal Relationship**

Gastrointestinal: Gastric or duodenal ulcer with bleeding and/or perforation, gastrointestinal hemorrhage, melena, gastritis, hepatitis, jaundice, abnormal liver function tests. **Central Nervous System:** Depression, insomnia, confusion, emotional lability, somnolence, aseptic meningitis with fever and coma. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme, Stevens-Johnson syndrome, alopecia. **Special Senses:** Hearing loss, amblyopia (blurred and/or diminished vision, scotomata, and/or changes in color vision) (see PRECAUTIONS). **Hematologic:** Neutropenia, agranulocytosis, aplastic anemia, hemolytic anemia (sometimes Coombs positive), thrombocytopenia with or without purpura, eosinophilia, decreases in hemoglobin and hematocrit. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure, palpitations. **Allergic:** Syndrome of abdominal pain, fever, chills, nausea and vomiting, anaphylaxis, bronchospasm (see CONTRAINDICATIONS). **Renal:** Acute renal failure in patients with pre-existing significantly impaired renal function, decreased creatinine clearance, polyuria, azotemia, cystitis, hematuria. **Miscellaneous:** Dry eyes and mouth, gingival ulcer, rhinitis.

Incidence less than 1%—Causal Relationship Unknown**

Gastrointestinal: Pancreatitis. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities, pseudotumor cerebri. **Dermatologic:** Toxic epidermal necrolysis, photoallergic skin reactions. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Bleeding episodes (e.g., epistaxis, menorrhagia). **Metabolic/Endocrine:** Gynecomastia, hypoglycemic reaction. **Cardiovascular:** Arrhythmias (sinus tachycardia, sinus bradycardia). **Allergic:** Serum sickness, lupus erythematosus syndrome, Henoch-Schönlein vasculitis. **Renal:** Renal papillary necrosis.

*Reactions occurring in 3% to 9% of patients treated with Motrin. (Those reactions occurring in less than 3% of the patients are unmarked.)

**Reactions are classified under "Probable Causal Relationship (PCR)" if there has been one positive rechallenge or if three or more cases occur which might be causally related. Reactions are classified under "Causal Relationship Unknown" if seven or more events have been reported but the criteria for PCR have not been met.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine so alkaline diuresis may be beneficial.

Dosage and Administration: Rheumatoid arthritis and osteoarthritis. Suggested dosage is 300, 400, or 600 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day. Mild to moderate pain: 400 mg every 4 to 6 hours as necessary.

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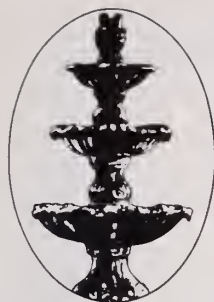
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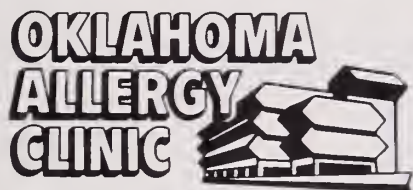
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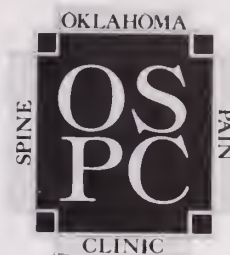
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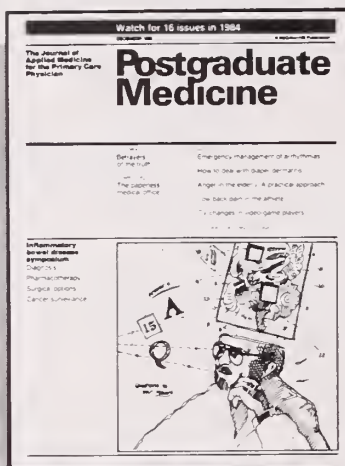
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Footnotes, bibliographies, and legends for illustrations should be submitted on separate sheets, double-spaced. Bibliographies should follow in order of: name and author, title or article, name of periodical with volume number, page and date of publication. These references should be numbered in the sequence in which they appear in the article.

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NEWS

Members of the Oklahoma State Medical Association, the constituent societies of the association, and all readers in general are invited to supply news items of general interest to the profession.

ADVERTISING

All advertising copy must be approved by the Editorial Board before acceptance for publication. General and miscellaneous advertising rates will be sent on request.

EDITING SERVICE

The Editorial Board reserves the prerogative to submit contributions to a Medical Editing Service when warranted. If such is felt necessary, the Editor will contact the author for approval, informing him that there will be a modest charge for this service.

REPRINTS

Authors will receive reprint order forms from the Transcript Press, PO Drawer 1058, Norman, Oklahoma 73070, prior to final publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

BACK ISSUES

Microfilm copies of back issues of *The Journal* may now be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

From the Prez . . .

One of the most difficult things about writing the Auxiliary page for this journal is that each article is due two months prior to your reading it. So often what is a pressing matter at writing is no longer an issue at publication. With this in mind I will say it is now November — a time for looking back over the year — for drawing friends and family near to give thanks for our accomplishments and to those who helped make them possible. Our county, state, and national leaders have given countless hours of their time and energy to achieve certain goals and should be thanked for their efforts. You will hear from other chairmen later but to date some of our accomplishments include the following:

We have more auxiliary OMPAC-AMPAC members this year than there have been in recent years. Although the percentage is small our numbers are growing. I think this shows a growing interest in legislative involvement.

For the first time, we have a state Publicity Coordinator, Betty Edge. Betty has mailed out several news releases for county use, most of them ready to be delivered to newspapers or radio stations in your communities.

Long Range Planning is developing a state

People Bank — a resource for speakers and information for county and state programs and projects.

Also this year, for the first time, the state Auxiliary has sponsored one (and is working on a second) public service announcement that was aired on TV and radio stations across the state. All PSAs will deal with health issues, with the first being childhood immunizations.

Other projects include the membership committee's "Join-a-thon," an auction for AMARF, and the continued efforts by county auxiliaries to install our organ donation posters in all license tag agencies across the state.

As your President, I would like to thank all those mentioned in the above, and those not mentioned, for their dedication to Auxiliary. From the county member on up, your efforts on behalf of Auxiliary are noticed and appreciated by many. We have enjoyed many blessings. In the spirit of Thanksgiving it is appropriate to appreciate all our blessings. I pray for one more blessing for all of us — A Grateful Heart.

Pam Oster
President

■ **Charles M. Cameron, MD, Oklahoma City**, has been named dean of the University of Oklahoma College of Public Health. He is a 1948 graduate of Vanderbilt University School of Medicine specializing in general preventive medicine. Cameron completed postgraduate studies in public health at the Harvard School of Public Health and the University of North Carolina School of Public Health, where he received a master of public health degree. He has served as deputy commissioner of the Oklahoma State Department of Health as well as chief of preventive medicine. Most recently he served as chairman of the Department of Health Administration for the University of Oklahoma.

■ **The new director of research and education** at the Oklahoma Cardiovascular Institute (OCI) in Oklahoma City is Clinton N. Corder, PhD, MD, of Tulsa. He received his PhD from Marquette University and his MD from Washington University in St Louis. Corder has held a professorship in both internal medicine and pharmacology at Oral Roberts University and most recently at the University of Oklahoma Tulsa Medical College. At the OCI, he will assume the direction of several ongoing investigative programs and expand the professional and public educational programs.

■ **American physicians order from four to forty times more outpatient tests than their British counterparts**, according to a study by Arnold M. Epstein, MD, MA, of Harvard Medical School, and colleagues in the *Journal of the American Medical Association (JAMA)*. The study documents differences in test use, the researchers say, adding, "Further study is needed to determine whether the conservative use of diagnostic services adversely affects patient outcomes or represents a more cost-effective form of care."

■ **The AMA claim form, now the most widely used and accepted claim form in the United States**, has been updated and revised. The new

form incorporates changes requested by the Health Care Financing Administration (HCFA). Using the old form after December 1 could delay reimbursement. HCFA has approved the new form for Medicare and Medicaid. More than thirty Blue Shield plans use the AMA form. The Health Insurance Association of America also recommends it to 300 member companies. To receive an information packet, write to the AMA Department of Health Care Financing and Organization, AMA Headquarters, 535 N Dearborn, Chicago, Illinois 60610.

■ **Primary care physicians numbered 202,117 in 1982**, representing 43.7% of the 462,947 practicing physicians in the United States as of December 31 of that year, according to the latest figures released by the AMA Physician Masterfile. Primary care specialties and the percentage of physicians in those specialties were: internal medicine, 17.3%; family practice, 7.3%; pediatrics, 6.8%; general practice, 6.2%; and obstetrics/gynecology, 6.1%.

■ **The Food and Drug Administration of the US Department of Health and Human Services** has published a monograph called "The Big Quack Attack" as part of a campaign to reduce health fraud. The monograph offers examples of nine categories of modern quack medical devices, including figure enhancers and arthritis and pain relievers, and suggests a rule of thumb: "If it sounds too good to be true, it probably is." For additional information: Alexander Grant, FDA, (301) 443-3170.

■ **One of the most dangerous medicosocial phenomena in recent years** has been the appearance of "chelation clinics" for the treatment of cardiac and peripheral vascular disease, writes Editor Alfred Soffer, MD, in *Archives of Internal Medicine*. "Not a single reputable cardiovascular society in the world endorses chelation therapy for the treatment of atherosclerosis," he says. The procedure has been deemed of no proven benefit by virtually every medically concerned agency.

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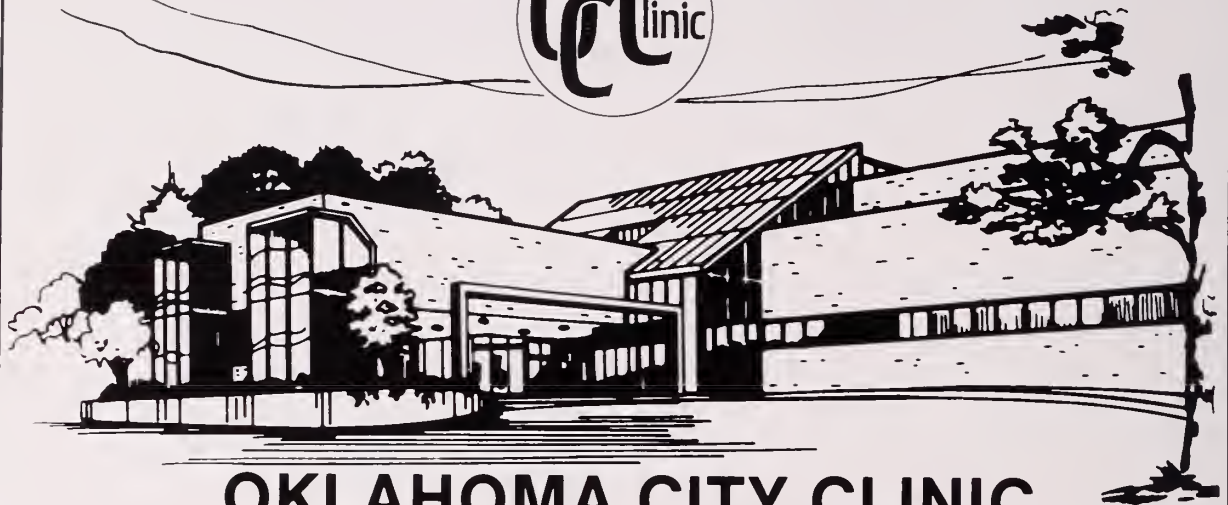


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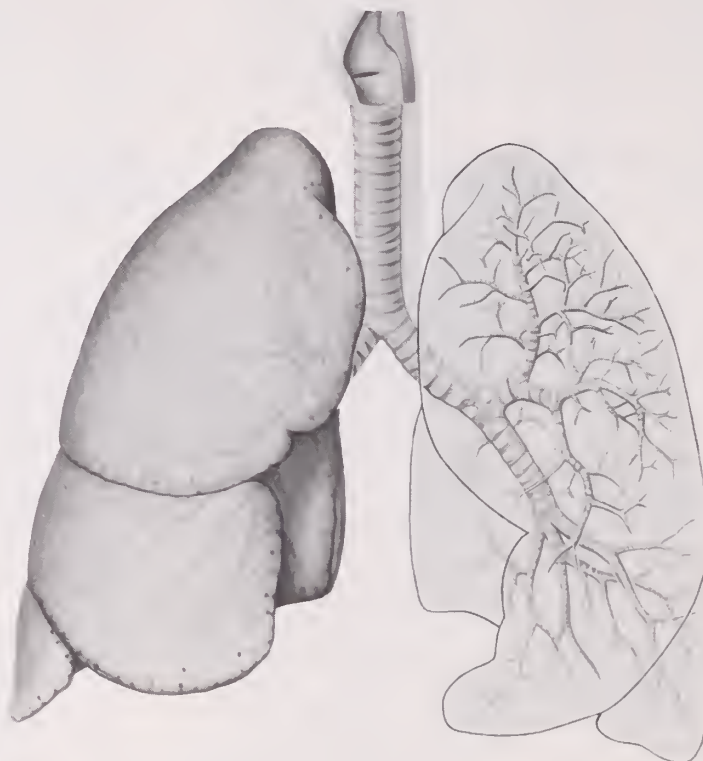
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Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Cecilor.

Contraindication Cecilor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings IN PENICILLIN-SENSITIVE PATIENTS. CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Cecilor, should be administered cautiously to any patient who has demonstrated some form of allergy particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics including macrolides, semisynthetic penicillins and cephalosporins; therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, manage-

ment should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions **General Precautions**—If an allergic reaction to Cecilor[®] (cefactor, Lilly) occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Cecilor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antioglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Cecilor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Cecilor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinistix[®] tablets but not with Tes-Tape[®] (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy—Pregnancy Category B—Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum

human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Cecilor[®] (cefactor, Lilly). There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers—Small amounts of Cecilor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.16, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Cecilor is administered to a nursing woman.

Usage in Children—Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions Adverse effects considered related to therapy with Cecilor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70). Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (fever, arthralgia, myalgia, and skin manifestations) accompanied by arthritis, arthralgia and frequently fever have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Cecilor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have

occurred in patients with a history of penicillin allergy. Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

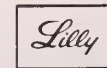
Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

(061782R)

Note Cecilor[®] (cefactor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285. Eli Lilly Industries, Inc., Carlsbad, Puerto Rico 00630.

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JOURNAL

Oklahoma State Medical Association

DECEMBER 1984

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The Journal of the Oklahoma State Medical Association (USPS 285-0000)

Roche salutes the history of Oklahoma medicine

PUTTING THE PAP TEST ON WHEELS



Introducing the new cancer detection procedure for women to rural areas was a challenge well met by the Oklahoma Division of the American Cancer Society when, in 1946, it converted an obsolete school bus into the nation's first cancer clinic on wheels.

Staffed by volunteer specialists—an internist, a dermatologist, a gynecologist and a surgeon—and one salaried secretary to handle the record-keeping, the recycled vehicle left Oklahoma City and headed north. Its first stop was Tonkawa,^{1,2} where advance publicity had drawn women from nearby towns, farms and reservations, all seeking the proffered examinations.

Cooperative effort

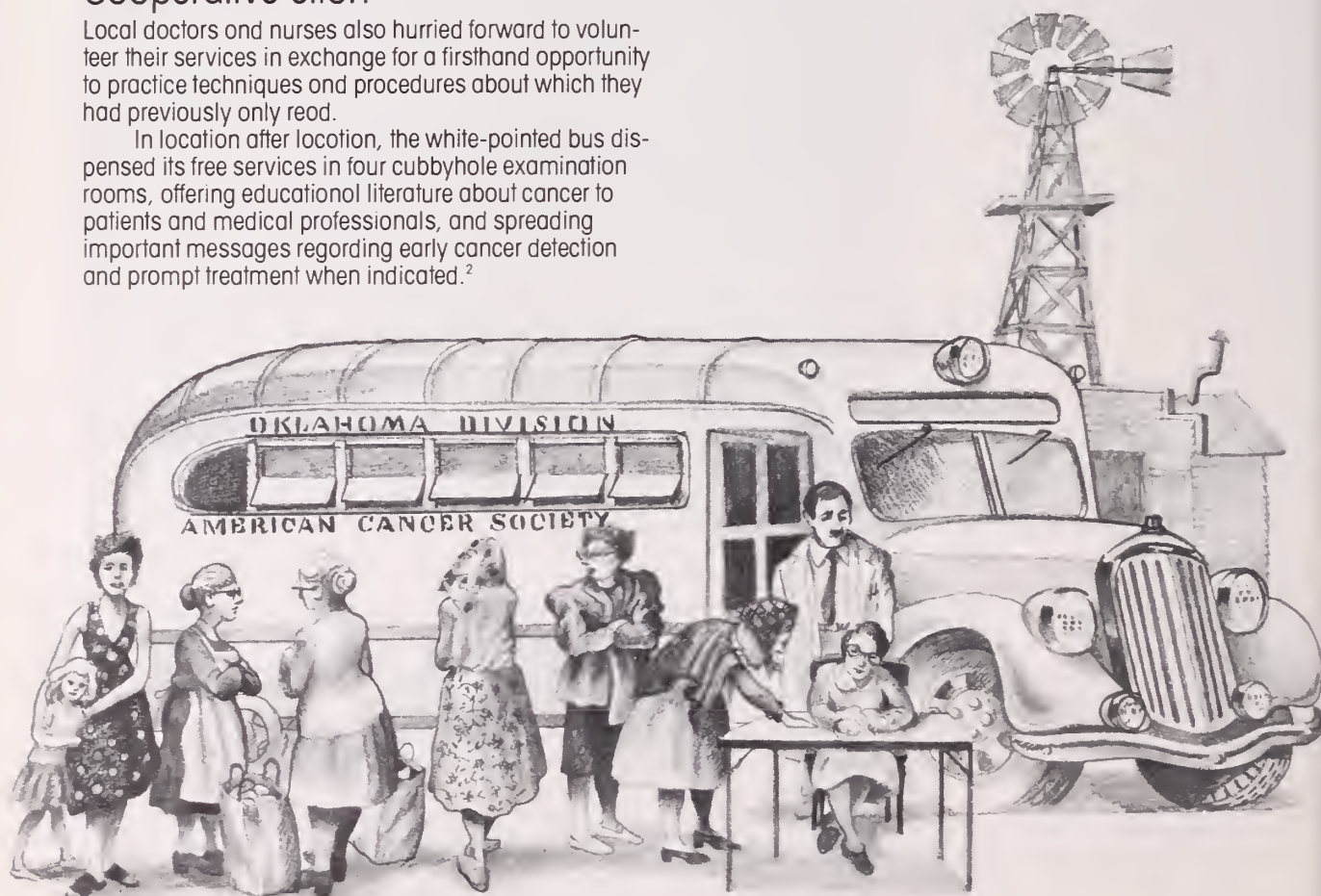
Local doctors and nurses also hurried forward to volunteer their services in exchange for a firsthand opportunity to practice techniques and procedures about which they had previously only read.

In location after location, the white-pointed bus dispensed its free services in four cubbyhole examination rooms, offering educational literature about cancer to patients and medical professionals, and spreading important messages regarding early cancer detection and prompt treatment when indicated.²

The idea caught on

Today, it is not surprising to see a modern medical services vehicle on wheels in shopping-center parking areas, schoolyards or business centers. Community service organizations sponsor and support them all across the country. Unquestionably, they have come a long way in equipment and comfort from the school bus that pioneered vital health services... but *it* was the bus that made medical history.

References: 1. Kone JN: *Famous First Facts*, 3rd ed. New York, The H. W. Wilson Co., 1964, p. 367. 2. Data on file, Hoffmann-La Roche Inc., Nutley, NJ.



When the history reveals anxious depression...

For the estimated 70 percent of nonpsychotic depressed patients who are also anxious,¹ Limbitrol provides both amitriptyline, specific for symptoms of depression, and the effects of Librium® (chlordiazepoxide HCl), the tested and dependable anxiolytic. Limbitrol is, therefore, a better choice for these patients than dual agents that contain a phenothiazine, a class of antipsychotic drugs used infrequently in nonpsychotic patients.¹

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Limbitrol also has a rapid onset of action which may lead to greater patient compliance. In a multicenter study, patients taking Limbitrol experienced 62% of their overall improvement within the first week of therapy.²

In another multicenter study,³ the following symptoms associated with anxious depression were significantly reduced during the first two weeks of therapy:

- ☐ Headache—79%
- ☐ Early insomnia—91%
- Middle insomnia—87%
- Late insomnia—89%
- ☐ Gastrointestinal upset—73%

In two multicenter studies, only 1.9% of Limbitrol patients experienced cardiovascular side effects.³

Patients should be cautioned about the combined effects with alcohol or other CNS depressants and about activities requiring complete mental alertness such as operating machinery or driving a car.

References: 1. Rickels K: Drug treatment of anxiety, in *Psychopharmacology in the Practice of Medicine*, edited by Jarvik ME; New York, Appleton-Century-Crofts, 1977, p 316. 2. Feighner JP *et al*: *Psychopharmacology* 61: 217-229, Mar 1979. 3. Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

In moderate depression and anxiety

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(as the hydrochloride salt)

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(as the hydrochloride salt)

Please see summary of product information on following page.

LIMBITROL® Tablets (X) Tranquilizer-Anidepressant

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of moderate to severe depression associated with moderate to severe anxiety

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use; then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.

Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).

Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated, sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration at ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects at both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs:

Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.

Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.

Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.

Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.

Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion.

Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single h.s. dose may suffice for some patients. Lower dosages are recommended for the elderly.

Limbitrol 10-25, initial dosage of three or four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol 5-12.5, initial dosage of three or four tablets daily in divided doses, for patients who do not tolerate higher doses.

How Supplied: White, film-coated tablets, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) and blue, film-coated tablets, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50.

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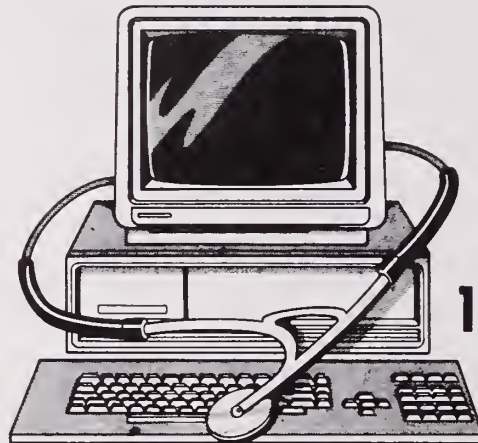


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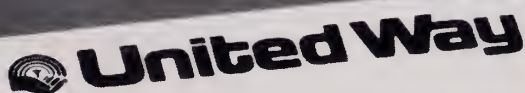
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but angina still
strikes...**



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Cardiovascular contraindications to the use of Isoptin are similar to those of beta blockers: severe left ventricular dysfunction, hypotension (systolic pressure <90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no artificial pacemaker is present) and second- or third-degree AV block.

So, the next time a nitrate is not enough, add Isoptin... for more comprehensive antianginal protection without side effects which may cramp an active life style.



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without beta-blocker
side effects.**

ISOPTIN[®] TABLETS

(verapamil HCl/Knoll)
80 mg and 120 mg

Contraindications: Severe left ventricular dysfunction (see *Warnings*), hypotension (systolic pressure <90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block. **Warnings:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (e.g., ejection fraction <30%) or moderate to severe symptoms of cardiac failure. Control milder heart failure with optimum digitalization and/or diuretics before ISOPTIN is used. ISOPTIN may occasionally produce hypotension (usually asymptomatic, orthostatic, mild, and controlled by decrease in ISOPTIN dose). Occasional elevations of liver enzymes have been reported; patients receiving ISOPTIN should have liver enzymes monitored periodically. Patients with atrial flutter/fibrillation and an accessory AV pathway (e.g., W-P-W or L-G-L syndromes) may develop a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion. AV block may occur (3rd degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema, and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with ISOPTIN.

Precautions: ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, patients should be monitored closely. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function or in patients who have also recently received methyl dopa. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patient carefully monitored. ISOPTIN may have an additive hypotensive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. **Pregnancy Category C:** There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use.

Adverse Reactions: Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR<50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%). The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: confusion, paresthesia, insomnia, somnolence, equilibrium disorders, blurred vision, syncope, muscle cramps, shakiness, claudication, hair loss, maculae, and spotty menstruation. Overall continuation rate of 94.5% in 1,166 patients.

How Supplied: ISOPTIN (verapamil HCl) is supplied in 80 mg and 120 mg sugar-coated tablets. July 1982 2068



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A public service message from this magazine and the Advertising Council.

Above All . . .

The following has been sent as a letter to Senators Nickles, Boren, Durenberger, and Congressman Synar:

(Notes and thoughts from the past year and including the recent Health Forum in Tulsa.)

I will define myself as a rural family practitioner who has been in Nowata, Okla, for one year. This past year has seen tremendous change in the financial end of medical practice. I greatly appreciated the chance to witness the recent hearing to discuss some of these issues. I feel that one of the highest privileges that we Americans have is to be able to address our representatives on a face-to-face basis. I know that you have agonized long hours over these changes just as we in the health care delivery end agonize over our patients, both of us realizing that our actions have a direct effect on people's lives now and in the future.

These changes have affected no other area more drastically than rural medical practice. I will grant you that rural care is basically inefficient. The lack of numbers and the variations in the day-to-day or even hour-to-hour patient load do not allow full utilization of employees or services. I am sure that it is a real temptation to try to cut back on reimbursement to these areas based on statistics alone. Statistics do not show the people or their dependence on the already scarce rural resources. Cutbacks in Medicare reimbursements by as much as a third have already forced many out of hospital positions, and may cut out as many as 1,000 rural hospitals. I don't think this is a true picture, but even the loss of a few can be life-threatening.

I'd like to illustrate what the closing of a single hospital could do to the community by using our own Nowata General Hospital (NGH) as an example. NGH serves a city of 4,700 in a county of 11,000. It is over 20 miles to the nearest hospital. The hospital in Nowata is the center of health care for the area. Not only does it represent emergency care, surgical, and medical care; it also provides the impetus for attracting physicians to the area (the last two in particular). Having only three doctors (over 55 years of age) for a county of 11,000 in 1982 should underline

the importance of the hospital in attracting physicians (or the lack of a hospital as a factor in losing them). The county is fairly poor and still staggering from the recent loss of oil economy. The doctors and the hospital in Nowata deal with people who need health care but have no money on a daily basis. Government cuts force us to look elsewhere for income to be able to stay in Nowata. If the poor can't pay, the indigent won't pay, Medicare and Medicaid are cut, and the insurance people move to lower-cost government-encouraged programs, the hospital and doctors will quickly see the writing on the wall and cut back on those who really need care but can't pay — or they will move on. Young physicians such as myself who have the energy to organize Health Fairs for the aged, write columns for the local newspaper, and push preventive medicine in the office and the community will be the first to leave. The loss of the hospital will mean 60 less jobs (one of the top 5 employers in the county) and 3 million less dollars in a suffering economy already too dependent on agriculture and oil.

It would be logical to ask the hospital to run more efficiently. I can't think of anywhere else that they can cut back. Already hours, employees, a whole wing, and needed replacement equipment are cut back, training is low, morale is lower, and pay is almost as low as government regulation allows.

Your choices this year on Medicare, which "covers" 58% of our patient load, will determine our ultimate course. Low rural physician fee profiles have kept doctors out of rural care. Now we face the loss of our hospital.

We need a hospital. We need more doctors in the county, not to lose two. We need equitable rural hospital reimbursements. We need equitable fee profiles so that our elderly can receive care and so that we can afford to stay in Nowata.

Doctors are pledged first of all to do no harm. We can only ask the same of you.

Robert C. Bowman, MD
Nowata

Otherwise, may your holidays be filled with joy.

—Ed.

Peace on Earth, Good Will Toward Men

The greatest gift of all times, without question, was the gift to the world of Jesus Christ, whose birth we celebrate this season.

His teachings, divinely inspired, moved many of a venerable faith (Judaism) to accept and embrace his assurance of salvation and eternal life, guaranteed by the God of Abraham, Isaac, and Jacob. These converts of the Jewish faith, with the converted gentiles and heathens . . . the early Christians . . . moved to dedication by His teachings, formed the early Church, now grown to be worldwide.



Though not all physicians in our Association are Christian, all of us should be motivated by that unselfish love to provide, to our patients, our best efforts of understanding, diagnosing, and hopefully curing whatever illnesses may be possessing them — with His help at every turn!

My wish for you and your "flock" is for great peace and success in your medical ministry, communicating realistically to enhance patients' understanding and acceptance of individual prognoses but most of all of your sincere desire to help them within the limitations existing in each situation.

Surely, then, goodness and mercy will again be attributes ascribed to doctors by a knowing public . . . and the profession, once again, might be highly respected by those we serve.

[Handwritten signature]
S. J. Sledge III, M.D.

The Chronically Mentally Ill

JAMES R. ALLEN, MD

PLANs for the deinstitutionalization of chronic mental patients have tended not to acknowledge the needs of this group, needs which generally exceed the capacities of psychiatric services as they exist today. Services for these people must be comprehensive and provide continuity of care. This paper will explore the characteristics of these patients and their unique needs, and some of the problems in meeting these needs in Oklahoma. The perspective is that from an Oklahoma urban community.

THE CHRONICALLY MENTALLY ILL: A DEFINITION

Although there have been many papers on this subject, there is little consensus on exactly who these people are. In the past, diagnosis was widely used as a criterion. People with what was then called schizophrenia were assumed to be chronically mentally ill. Length of hospitalization has also been used, but is of limited current value because we are faced with a significant group of "new, young, chronics," people in their early twenties who have never been institutionalized, but who would have been in the

past. Most clinicians are aware of the great variation within diagnostic groups and distinguish between diagnosis and disability. Consequently, amount of impairment and length of disability are now widely used as primary diagnostic criteria for this category.

In 1978 a task panel of the President's Commission on Mental Health¹ defined four categories of the mentally ill: (1) people minimally disabled for a short time, (2) people minimally disabled for a long time, (3) people severely disabled for a short time, and (4) people severely disabled for a long time. They limited the definition *chronically mentally ill* to this last group.

The Oklahoma State Department of Mental Health has chosen a somewhat different definition based on a 1981 National Institute of Mental Health classification. It classifies as chronically mentally ill those who have been institutionalized more than once or who have had a single episode of institutional care lasting at least two months. People whose primary disability results from mental retardation, alcoholism, or drug abuse are excluded.

The "new, young, chronic" patients form a particularly troublesome group. Many of them have experimented with drugs, and most are acutely aware of their civil rights. Although

frequently diagnosed as schizophrenic, many of them are better classified as borderline or as having other severe personality disorders. Sheets has proposed three subpopulations.² One group, well ensconced in the role of patient, consists of those poorly motivated, passive, apathetic individuals who are extremely dependent on psychiatric services. A second group is composed of isolated individuals with limited social supports and high aspirations, who can function well when in remission. The third group — the group most commonly described — is comprised of highly mobile individuals who have little self-control and who are easily frustrated.

THE CHRONICALLY MENTALLY ILL: SOME CHARACTERISTICS

When institutionalization was considered acceptable, the ability of these patients to provide for their own needs was being underestimated. This bias has been replaced, however, by an equally destructive neglect of the legitimate needs of these patients when they are removed from the relative safety of the asylum. Many live in the community, but in no sense are members of it. The political motive underlying statements about "harmful" mental hospitals is revealed in the lack of opposition to private hospitals acting as custodial facilities.

Of the two million chronically mentally ill in the United States today, fewer than ten percent live in hospitals, and increasing numbers can be found among the homeless. The needs of these patients are enormous.³ In state hospitals they were provided with what they needed to survive — medical, psychiatric, dental, and nursing care; socialization; social services; vocational training; hotel services; sheltered work; rehabilitation; and recreational services. In the community, no such package exists. Few communities offer such a range of services, and fewer still have them organized into a network of care. Unfortunately, many communities are able to provide only an understaffed aftercare clinic, some inadequate nursing homes, and a welfare office. Furthermore, when one considers the problems that healthy people have in dealing with bureaucracies, it can hardly be a surprise that the chronically mentally ill, with their often limited social and communicative skills, are at a great disadvantage.

The most glaring need of almost all these patients is decent housing. Frequently they need a gradual transition from institutional life

to independent living. Optimally, this should include a gradient of living opportunities: transitional living facilities, supervised group homes/foster homes, crisis hostels, board-and-care homes, independent group homes, and individual apartments. Most communities offer only inpatient hospitalization and a few nursing homes or board-and-care homes.

Because many have recurrent or episodic illnesses, these patients require careful monitoring and follow-up, and the availability of 24-hour crisis services. Their recurrences are often severe, involving the reemergence of full-blown psychosis, impaired judgment, and inability to take care of themselves. Because these patients have chronic disorders, they need the same continuity of care, for example, as patients with diabetes mellitus or chronic lung disease. Indeed, acute recurrences are to be expected as part of the patient's long-term care.

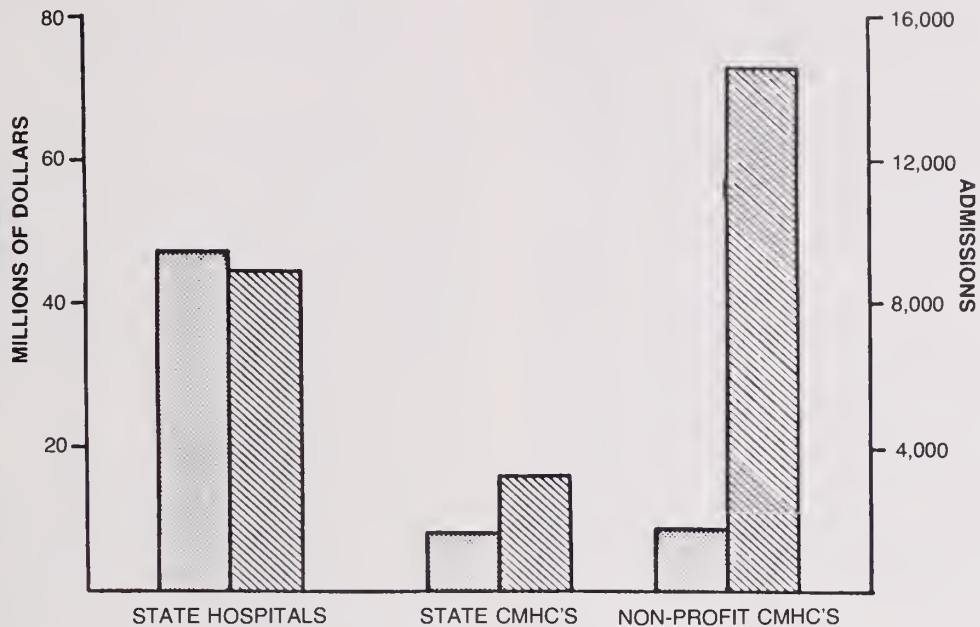
An episode of illness often leaves some disability. Among discharged mental patients, 70% return to a less skilled job. Therefore, provision must be made for episodic deterioration. In addition, the patient who frustrates a therapist by failing to improve may sometimes encounter punitive behavior disguised as treatment.

These patients rarely have intact families. Because both major affective disorders and schizophrenic disorders have a genetic diathesis, the families of these patients are often impaired. In addition, these patients tend to alienate the support they do have because of their problems in interpersonal relationships. Mental health workers have often failed to recognize the toll of mental illness on the patient's family and the family's understandable resistance to rehabilitation efforts. An editorial in the *British Medical Journal* put it clearly: "You can put him in a back yard for the rest of his days and then you have written him off, his life is finished. Or you can have him at home, and then you have to accept that you have to alter your whole life. You will never be free again."⁴

From this description, it can be seen why these patients require a diversity of services. However, the services needed are often not in the repertoire of health professionals. These patients are seen as dull and boring, and therefore are unwanted. Actually, they are difficult and challenging.

In reality, the label of "chronically mentally ill" usually is given to people who are poor; lacking the basic survival skills needed in our

STATE GENERAL REVENUE FUNDS (Figures in millions)
APPROPRIATED TO STATE MENTAL HOSPITALS, STATE CMHC's,
AND NON-PROFIT CMHC'S CONTRASTED TO
PATIENT ADMISSIONS: SFY 1982^o



SOURCE:
GOVERNOR'S LEGISLATIVE BUDGET
ADMISSIONS DISCHARGE SUMMARY
SFY 1982

OKLAHOMA STATE DEPARTMENT
OF MENTAL HEALTH

society; lacking adequate medical care and job skills; without adequate housing; unattractive because of poor hygiene, unsuitable clothing, or the neurological complications of drug treatment; and unable to obtain the services most health professionals wish to provide.

Many of these patients need training in basic survival skills: how to budget, how to shop, how not to be evicted, how to behave on the bus, and how to negotiate the various bu reaucracies that are supposed to help them.

Traditional psychodynamic psychotherapy has limited relevance for many of these people. Generally, insight should be reality based and "here and now," focused on such issues as the effects of stress and the use of medication. The therapist should be goal directed, helping the patient set up manageable short-term tasks. The therapeutic relationship may well be lifelong, although face-to-face contact may be irregular. Family therapy, too, is important. Even in a condition such as schizophrenic disorder, which often seems to have some biological underpinning, the family crisis therapy of Goldstein and his associates at UCLA; the psychoeducational approach of Anderson, Ho-

garty, and Reiss; the group approach for relatives of Leff, Berkowitz, and Kupers; and the behavioral family therapy approach of Falloon and Liberman have all produced statistically significant results.⁵

Recent research has demonstrated the importance of working with the patient's social support system, including the family, especially after the first psychotic break. A social support-system is composed of friends, neighbors, and co-workers, as well as professionals. Indeed, evidence is accumulating to support the idea that professionals may play a less important role in the patient's coping with problems than do friends, family, and others.⁵ Expanding the networks of these patients and increasing the number of peers in those networks now appear to have both a preventive and a curative role.⁵

A NATIONAL PROBLEM

Although we have learned that these patients need a vast array of supportive services — housing, income, education, and vocational and social rehabilitation, as well as a full range of medical and psychiatric services — there have

been very few attempts to use this knowledge.⁶

In the United States we have been uncertain about where these people belong. At times it has been considered appropriate to keep them safe, secure, and out of sight in asylums. At other times we have given them the same residential rights as other citizens — at least in theory. Community mental health centers were designed to replace state hospitals, which an earlier age had expected to replace almshouses and workhouses. None of these solutions has solved the problem.⁷

In 1975 the American Psychiatric Association charged an ad hoc committee to study the issue and propose a national policy. Yet, since then the problems have become worse. While deinstitutionalization has proceeded everywhere, state monies have not followed the patient into the community setting. Threatened with loss of accreditation to state hospitals, states have shunted money from community to state facilities. In a time of cost-containment, chronic patients have been the first to be discriminated against by reimbursement mechanisms.

RESPONSIVE PROGRAMS

Given the differences in their levels of functioning, prognoses, symptomatology, and histories of institutionalization, it is difficult to make comprehensive statements about these patients. Obviously, there can be no single right way or place to treat them. Certain generalizations can, however, be made about responsive programs.⁸ They all provide networks of inter-related patient populations. They meet the needs of several overlapping patient populations. There is need for at least the following:

► Twenty-Four-Hour Crisis Stabilization Services

Many patients undergo crises that require immediate intervention. This may consist of rapidly initiated doses of medication, on-site counseling, mobile crisis services, emergency hotlines, and emergency shelters.

► Range of Treatment Settings

These patients need a range of treatment alternatives: inpatient, outpatient, partial hospitalization, and home care services.

► Range of Treatment Services

These patients require a wide range of treatment services:

1. Vocational, employment, and educational services
2. Psychotherapy, and training in daily living skills
3. Social, recreational, and leisure services
4. General health services

► Case Management

Case management is a patient-oriented concept. These patients need some human being who will stick with them and work to keep them in the service system. Case management provides this support. It consists of such activities as arranging appointments, monitoring service delivery, providing patient advocacy, coordinating personnel from multiple agencies, and mobilizing and maintaining the patient in a social support network.

Although there is an immense amount of literature on case management, there is little agreement on its essentials. In its accreditation criteria for mental health services, the Joint Commission of Accreditation of Hospitals lists five necessary elements. These are: assessment, planning, linking, monitoring, and advocacy.

► Range of Residential Settings

Residential alternatives should include hospitals, where all treatment and rehabilitation programs are available, and a variety of out-patient arrangements. These include: halfway houses, three-quarter houses, longterm group residences, cooperative apartments, lodges, foster care homes, board-and-care homes, hotels, supervised apartments, and independent residences.

Of course, not every community can provide all of these. Those encouraged in a particular community are determined by the size and characteristic of that community's target population. In Tulsa, for example, approximately one thousand volunteers, professional and lay, have developed a consortium of mental health services under the aegis of the Tulsa Mental Health Council.⁸

Under no circumstances should patients be placed in situations beyond their coping capabilities. Yet, in state after state, patients have been placed inappropriately, some even into poor nursing homes or welfare hotels where they become the objects of all sorts of exploitation. Recent allegations of starvation, sexual abuse, overmedication, and worse in some Oklahoma board-and-care homes, while creating

a public scandal, are but a repetition of what has occurred in many states.

In Oklahoma there are nine "transitional living centers" that are halfway houses where former hospital patients can learn to live on their own. These centers are operated by community mental health centers that annually receive 1.2 million dollars from the state. In addition, there are a number of boarding homes that provide room, board, and minimal supervision for people who don't qualify for nursing homes. A few patients are placed in private homes.

Missouri, in contrast, has a model system as a result of the state's 1979 Omnibus Nursing Home Act. Missouri licenses four types of adult

These patients need a vast array of supportive services.

care facilities: adult boarding, immediate care, residential care, and skilled nursing facilities. Each provides progressively higher levels of care for residents, ranging from minimal to total. Missouri has 420 boarding homes, compared to Oklahoma's 96. For the needy, Missouri provides supplemental payments of up to \$236 monthly. Since 1981, Missouri has had strict structural requirements for new facilities.

In Tulsa, there is one halfway/three-quarter house, the Zarrow Independent Living Center, which can house sixteen patients, and a program of foster care. To this, a HUD-funded apartment unit will soon be added in north Tulsa.

► Transportation and Access to Services

Frequently overlooked is the patients' need for access to these service systems. Because of their handicaps or their economic situations, or because of inadequacies in public transportation, many chronic patients do not have access to services. This problem may be compounded by a whole series of related factors.

The case of Sandy Park, a housing development in the affluent community of Tulsa, is instructive. This one-quarter square mile is within sight of the new Zink Lake, but the people there have few of the services of Tulsa.

Most of the inhabitants live below the poverty line, and few have job skills. Sixty percent do not have telephones. There is only one public telephone, and it is frequently broken. Crime and fear are rampant. Adolescent pregnancy is high. Yet, until very recently there had been little effort to focus community resources on this area.

For twenty years, we have known about the effects of community apathy in increasing the prevalence of all mental disorders, yet relatively little has been done to correct the situation.

► Continuity of Care

The concept of continuity of care refers to the orderly progression of patients through the service system. It means that care is longitudinal in nature, for many of these patients have lifelong disorders. It means that care is consecutive and coordinated. The revolving-door phenomenon, whereby patients return to hospital inpatient services again and again, reflects the absence of such care. Continuity of care means that care is comprehensive. Social services, which traditionally have not been regarded as part of medicine, are not ancillary for these patients; they are essential. Continuity of care means that care must be individualized and flexible, and that services must respond to changes in a patient's life circumstances. It means that there must be communication and a relationship. The patient's contacts with the service system should be characterized by closeness and familiarity, and by communication, both between patient and providers and among the providers.

At present, unfortunately, this paradigm is frequently absent from the mental health service system. Even patients under continuous care frequently do not receive continuity of care. A disorder such as schizophrenia is not adequately managed by symptom reduction alone. Disability frequently persists far beyond hospitalization, but cannot be treated adequately in a simple aftercare clinic. Yet, it is just such fragmented care that is encouraged by current reimbursement policies.

FINANCES

Moving patients from the back wards of state hospitals to the back rooms of psychiatric ghettos, while a common practice, appears to be of no value whatsoever. The programs that are needed are not cheap. Yet, who is to pay? In

the private sector, the reimbursement policies of third-party payers have fragmented the system, encouraging continuous bouts of hospitalization, but neither continuity nor comprehensiveness of care. In the public system, the programmatic and fiscal policies of the State of Oklahoma — while similar to those of most states — are instructive.⁸ Although patients have been transferred to the community, appropriate funding has not followed them.

The question is: Who is responsible for the care of the indigent mentally ill? Although much has been said about the responsibility for care of the medically indigent, the problem is even more severe in the case of the chronically mentally ill.

In the last few years, Oklahoma has made strides in planning for the chronically mentally ill. These include the development of fourteen

Who is responsible for the care of the indigent mentally ill?

new community mental health centers, encouragement of state hospital screening at local levels, the recommendation of local two-week inpatient programs to prevent unnecessary hospitalization, and the reorganization of state hospitals. However, these changes raise two ethical and financial issues.

First, it is difficult to develop a community support system without adequate funding. Community treatment, if administered properly, is not cheap treatment. If mishandled, it is a cruel charade perpetrated on these patients, their families, and their communities. Ultimately, we are faced with the psychiatric version of an old economic problem — whether to buy guns or butter.

Second, we are faced with the question: Is this the most appropriate use of state dollars? In terms of future productivity, the state might better spend its resources on outpatient treatment of people who can be expected to return to full functioning; or perhaps it should provide funds for consultation-liaison psychiatry, which has been shown to reduce significantly the need for medical services. This becomes a version of the ethical questions confronting all medicine — whether to invest in expensive care for the

few or less expensive care for the many, in prevention or in rehabilitation.

The State of Oklahoma has shown commitment to community mental health in written goals, but not, I believe, in funding priorities. Support from the federal government has decreased from approximately 9 million dollars in fiscal year 1981 to only about 5.3 million dollars for fiscal year 1984. Meanwhile, the state's support has increased from approximately 9 million dollars in fiscal year 1981 to over 21 million dollars in fiscal year 1984 — an increase in support of 18%.⁹ However, the figures need to be considered in context. In 1970 there were nearly 3,000 patients in state mental hospitals. It was estimated that by June 1983 the number would be less than 1,300. Yet, the cost has increased by 313%.

The shift in admissions to state hospitals and the contrast between funding and actual service delivery can be seen most clearly when contrasting health centers, state hospitals, and not-for-profit community mental health centers¹⁰ (See Fig).

The cost of good care in the community does not have to be exorbitant. Under the aegis of the Tulsa Mental Health Council, over 700 volunteers — professional and lay — developed a countywide mental health plan for the mentally ill in Tulsa. Over a period of four years, they completed the first needs assessment and established three new community mental health centers and a countywide crisis stabilization unit. As a result of this effort the cost of care per public patient actually decreased by 4.5% (24% if inflation is considered) during a period when the cost of general medical care rose by almost 74%. This was done by developing a network of care based on the Balanced Service System, a general system model; by encouraging the specialization of service; and by stressing outpatient alternatives.

If the community mental health centers of Oklahoma were to become a system of care primarily for the chronic patient, however, they might well self-destruct. It is important that most of these patients receive medication and medical supervision. However, most physicians and most psychiatrists find such centers and such patients neither interesting nor prestigious. Since psychiatrists alone among medical specialists are expected to be in short supply by the year 1990, it would seem likely that they may desert the community mental health centers, leaving the patients in the care of nonmed-

ical personnel. This process has already occurred in many states, and it leads to a vicious feedback system where fewer and fewer psychiatrists, then fewer and fewer competent mental health workers of any type are willing to work in the centers. The end result is a third-rate system of care for patients who come to be regarded as third-rate. In Oklahoma, especially in eastern Oklahoma, where there has never been a sufficient number of psychiatrists, the situation could be particularly discouraging.

If Oklahoma medicine and psychiatry, or if we as citizens recognize a major responsibility to these patients, then we must be assertive in procuring their status as rightful recipients of appropriate care. The American Psychiatric Association recognized this from a national perspective when it adopted a "Proposal for Public Policy on the Chronic Mental Patient" in 1978:

"There is no more urgent concern than the needs of the chronically mentally ill who suffer from severe, persistent, or recurrent mental illnesses with residual social or vocational disabilities. As a result of the deinstitutionalization programs of the past decade and the continuing growth of high risk populations that generate (the) chronically ill, the problems associated with the care of these patients constitute a national crisis."¹

The author wishes to express his appreciation to members of the State Department of Mental Health, the Social Policy and Planning Committee of the Tulsa Mental Health Council, and to Ms Julie Gustafson, although none of the above is responsible for the opinions stated herein.

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Poison-warning stickers may not work

Toddlers may not be deterred from manipulating containers that are labeled with poison-warning (Mr. Yuk) stickers, according to Katherine Vernberg, MPH, and colleagues from the University of Virginia School of Medicine in Charlottesville. They examined the behavior of 20 children, aged 12 to 30 months, before and after education on labeling and poison. Before instruction, toddlers played with labeled and unlabeled containers without statistical preference. After instruction, they showed a touch preference for the poison-warning labeled containers. The report appears in the November *American Journal of Diseases of Children*.

Popliteal Artery Injury Associated with Knee Dislocation

WALTER W. BELL, MD
M. ALEX JACOCKS, MD
DANIEL H. CARMICHAEL, MD

Popliteal artery injury is associated with 20% to 40% of knee dislocation injuries. Prompt recognition and treatment are vital to reducing the 15% to 40% incidence of major morbidity.

COMplete dislocation of the knee is being seen with increasing frequency this decade.¹ The rising incidence of motor vehicle accidents, particularly those involving motorcycles; vehicle-pedestrian accidents; and football "clipping" injuries, are all prone to knee dislocation.

ANATOMY

"The popliteal artery is the continuation of the femoral and transverses the popliteal fossa. It commences at the opening in adductor magnus at the junction of middle and distal thirds of the thigh, and extends downwards and slightly laterally to the intercondylar fossa of the femur. Thence it continues obliquely to the lower border of poplitus where it divides into anterior and posterior tibial arteries."² There is a rich anastomotic network of arteries arising from the popliteal artery consisting of five named

branches³ as well as several muscular and cutaneous branches. Critical to the vulnerability of the popliteal artery in dislocational injury is the fact that the artery is tethered by the adductor hiatus above and by the tendinous arch of soleus muscle below.

PATHOPHYSIOLOGY

Although the knee can be dislocated in any direction, the anterior displacement is most common. This type injury causes stretching of the popliteal artery with intimal disruption leading to thrombosis of the vessel. The less common posterior displacement leads more often to laceration and complete disruption of the artery.^{1,4} The reported frequency of significant popliteal artery injury associated with knee dislocation varies from 20%⁵ to 40%.⁶ Nearly half of the patients with arterial injury will also have significant popliteal vein injury, and 20% will have nerve injury.⁷

Due to the presence of the genicular arteries, the distal extremity may remain warm and viable after popliteal injury until hemorrhage into and swelling of the popliteal space becomes sufficient to obliterate these small vessels. Initial examination in the emergency room may even reveal normal or near-normal distal pulses in the case of a partial disruption, leading to delay in diagnosis and treatment. Failure

to diagnose and promptly treat popliteal artery injury results in calf claudication at the least and amputation in up to 50% of patients.⁸

DIAGNOSIS

The finding of a painful, unstable knee joint associated with a history of blunt trauma or the finding of a frankly dislocated knee should raise the question of popliteal artery injury.

Immediate closed reduction of the dislocation should be accomplished. Decreased distal pulses or a cool, pale foot after reduction should prompt immediate operative exploration of the popliteal space. Doppler pulses or even palpable pulses may be present distal to a popliteal disruption, and to ascribe a decreased distal pulse to "arterial spasm" may well jeopardize the limb.

Preoperative arteriography is not indicated and can delay treatment in those patients in whom physical examination reveals arterial compromise. O'Donnell⁹ and Welling⁴ recommend angiography in all cases of complete knee dislocation associated with normal distal pulses and immediate exploration without angiography of all other injuries. It is, of course, recognized that other associated injuries, such as multiple fractures in a leg or a history of occlusive vascular disease, might make preoperative angiography desirable and other life-threatening injuries might take priority over immediate management of the extremity injury.

OPERATIVE MANAGEMENT

Once the likelihood of popliteal injury has been established and the patient's overall status permits, immediate operative exploration of the popliteal space should be undertaken. Patients seen initially at hospitals not served by physicians experienced in peripheral vascular repair should be transported as rapidly as possible to a hospital with a vascular surgery team immediately available.

The Emory group¹⁰ recommends prerepair fibulectomy and fasciotomy for all cases of popliteal injury. Certainly prerepair fasciotomy should be carried out if there is any suspicion of compartmental hypertension. There is no disagreement that, at the least, postrepair fasciotomy should be carried out if there is any suspicion of compartmental hypertension or swelling. Patients who have had crush injury to the distal leg or whose leg has been ischemic for more than six hours are particularly prone to elevated compartmental pressures.

Popliteal artery exploration for trauma is usually carried out through a medial incision rather than a posterior incision. The medial approach allows the patient to remain supine (facilitating anesthetic management), allows more extensive exposure of proximal and distal structures, and allows easy access to the saphenous vein if a graft is needed.

Once proximal and distal control of the artery are achieved, one should carefully inspect the popliteal artery as well as associated veins and nerves.

With blunt trauma to the popliteal artery, primary repair is usually not possible for two reasons: (1) generally more than 1.5 cm of artery is damaged, making resection and reanastomosis without tension nearly impossible, and (2) mobilization usually would entail sacrifice of the important genicular collaterals that might make the difference in limb survival in the event of failure of repair.¹¹ Therefore, after excision of the injured popliteal segment, an appropriate length of saphenous vein is harvested from the uninjured leg to preserve all available venous outflow in the injured limb. While one surgeon is harvesting vein, the other uses the Fogarty catheter to retrieve clot from the proximal and distal arterial tree. Regional heparinization of the extremity is usually employed. An accurate vascular anastomosis with 6-0 or 7-0 prolene completes the revascularization. Although one group¹² recommends the routine use of polytetrafluoroethylene (PTFE) and reports consistently good results, most reserve PTFE for those cases in which autogenous vein is unavailable or inadequate.

On-the-table arteriography should be done to detect technical error or tandem injury, or to reveal persistent clot requiring removal.

Attention can then be directed to evaluation and repair of any nerve, tendon, or bone injury. Finally, stabilize the limb by internal or external means. Most workers agree that postoperative anticoagulation is unnecessary, although many use antiplatelet agents (aspirin) postoperatively.

CASE REPORTS

Three cases are selected from recent experience at the Oklahoma Teaching Hospitals.

Case 1. A 78-year-old black woman slipped and fell, suffering anterior dislocation of the right knee. Evaluation six hours later revealed an unstable knee and mottling and coolness of the right foot, with absent pedal pulses. An arteriogram showed occlusion



Fig. (Case 3) Intraoperative arteriogram before (left) and after (right) repair with saphenous vein interposition graft.

of the popliteal artery in the midpopliteal area. The popliteal space was explored and extensive popliteal artery intimal disruption was found. The damaged artery was excised and replaced using PTFE since the saphenous vein was inadequate. Blood flow was restored eleven hours after the injury occurred. The orthopaedic injury was treated by external fixation. The leg was functional, with palpable pulses, when the patient was discharged from the hospital.

Comment. The arteriogram was obtained because of the patient's age and history of occlusive peripheral vascular disease. Although there was a significant delay in reestablishing blood flow to the lower extremity, this patient did very well following surgery and discharge.

Case 2. A 24-year-old white man sustained a posterior dislocation of the right knee and a closed crush injury to the right calf in a motorcycle accident. On examination in the emergency room, no pedal pulses could be detected in the injured leg. The patient underwent immediate fasciotomies followed by exploration of the popliteal fossa and repair of the disrupted popliteal artery using autogenous vein from the opposite leg. In spite of angiographic proof of patency, distal embolectomy, and regional heparinization, blood flow could not be maintained through the graft. The condition of the leg deteriorated over the next three days, resulting in below-the-knee amputation.

Comment. This case underscores the importance of the distal vascular bed to successful repair. This patient's crushed calf compromised flow and made graft patency impossible despite a technically adequate repair.

Case 3. A 26-year-old white man was involved in a motorcycle accident that caused anterior dislocation of his left knee and multiple facial lacerations. After being seen at the local community hospital, the patient was transferred to Oklahoma Memorial Hospital (OMH) because of a pulseless left lower leg. Because no pulses were present in the left foot after reduction of the dislocation in the OMH emergency room, the patient was taken to the operating room. Fasciotomies were performed and the popliteal artery was explored through a medial incision. Once proximal and distal control of the popliteal artery were obtained, further exploration of the popliteal space revealed complete intimal disruption of the popliteal artery in the popliteal space. In addition, there was a laceration of the popliteal vein. The popliteal vein was repaired directly with 6-0 prolene interrupted sutures. A segment of saphenous vein from the right leg was harvested, reversed, and used to replace a 2- to 3-cm segment of the left popliteal artery. After the interposition graft was completed, good pulses were detected in the foot. An arteriogram revealed good flow of blood through the saphenous vein segment and into the lower leg (Fig A and B). Revascularization was achieved approximately six hours after injury. The orthopedic surgery team then completed exploration and stabilization of the knee joint.

Comment. This patient underwent early fasciotomies and early exploration of the popliteal artery with replacement using a saphenous vein graft from the opposite leg. In addition, an injured popliteal vein was repaired, restoring adequate outflow from the extremity. The patient has done very well following surgery.

OUTCOME

The overall salvage rate in recently published reports of popliteal artery injury associated with dislocation of the knee ranges from 60%¹³ to 85%.¹ Although the number of patients studied in most reports is too small to allow definite statements about factors concerning outcome, it is clear that time is a major factor. Miller's animal study¹⁴ shows that six hours after arterial occlusion occurs, significant myonecrosis begins to supplant reversible ischemia. The clinical study of Green⁶ bears this out in humans, although salvage is certainly possible beyond these six hours, as many case reports have shown, and successful revascularizations are possible more than 24 hours after injury occurs.^{1,15} A crushing of associated distal soft tissue, failure to perform prompt fasciotomy, and late wound sepsis are certainly important determinants of outcome of this complex injury.

SUMMARY

1. Dislocation of the knee is associated with a high incidence of injury to the popliteal artery.
2. Clinical signs of distal arterial insufficiency should prompt immediate surgical exploration of the popliteal space.
3. Elapsed time from injury to operating room is the major preoperative determinant of outcome.
4. Optimal operative management hinges upon precise vascular repair, repair of concomitant venous injury, early compartment decompression if necessary, and performance of operative angiography.

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Coming in January . . .

Papers scheduled for publication in the January issue of THE JOURNAL of the Oklahoma State Medical Association include reports on intraoperative ultrasound, the self-monitoring of blood glucose levels, the results of glaucoma and visual acuity screening in Garfield County nursing homes, and the shaving of intravenous sites.

Clinical Pharmacology of Glucocorticoids

JUDITH BLACKWELL, MD
STEPHEN R. NEWMARK, MD

ADRENAL corticosteroid hormones are frequently used in clinical medicine for anti-inflammatory and immunosuppressive actions. Certain of these hormones are also termed glucocorticoids because of their influence on the intermediary metabolism of carbohydrate. Although cortisol is the main adrenal secretory glucocorticoid, many synthetic analogues have been introduced in recent years. Proper use and administration of these agents depend upon an understanding of the biochemical actions of the physiological steroid (cortisol) and the unique actions of the synthetic glucocorticoid derivatives.

I. BIOCHEMISTRY

A. Intermediary Metabolism

A major action of glucocorticoids is the enhancement of *gluconeogenesis* and the promotion of *glycogenesis*. Those actions are the result of both the antagonism of insulin action and the mobilization of amino acids from muscle to liver, where

the amino acids are utilized as glucose precursors. The clinical consequences of these biochemical actions are (1) hyperglycemia (exacerbation of diabetes) and (2) protein depletion (muscle wasting).

Adequate fatty acid mobilization from adipose tissue is also dependent upon cortisol. In addition, cortisol inhibits long chain fatty acid synthesis. These biochemical actions provide substrates for ketogenesis and promote ketosis.

B. Immunological Effects

Glucocorticoids exert major suppressive actions on phagocytosis of foreign antigens by macrophages. Both macrophage and polymorphonuclear cell migration to injury are inhibited by glucocorticoids. Although antigen and antibody interaction is not prevented by glucocorticoids, other secondary mediators of inflammation such as kinin and histamine release are decreased.

Glucocorticoids probably do not inhibit mature thymus-cell (T-cell) or antibody-producing (B-cell) lymphocytes; however, glucocorticoids will suppress lymphocyte-mediated manifestations of delayed hypersensitivity such as tuberculous reactions and other diagnostic skin tests.

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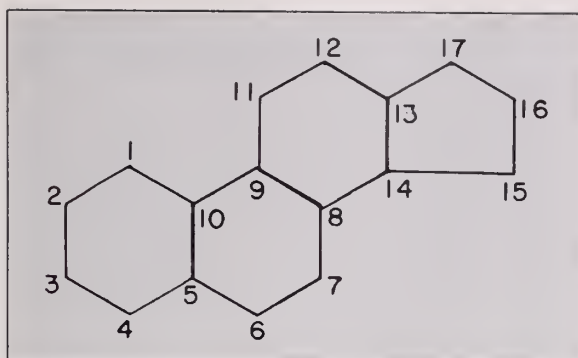


Fig 1. Cyclophenanthrene nucleus.

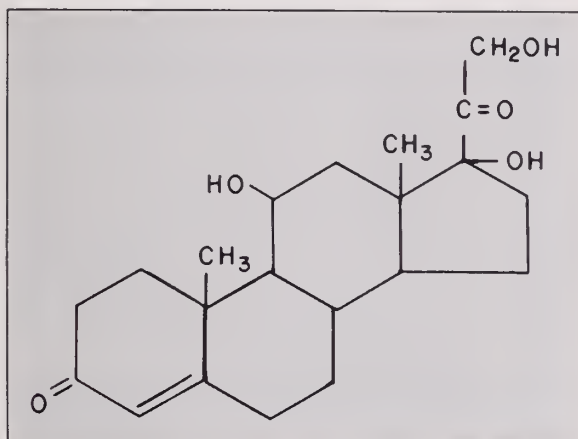


Fig 2. Structure of cortisol.

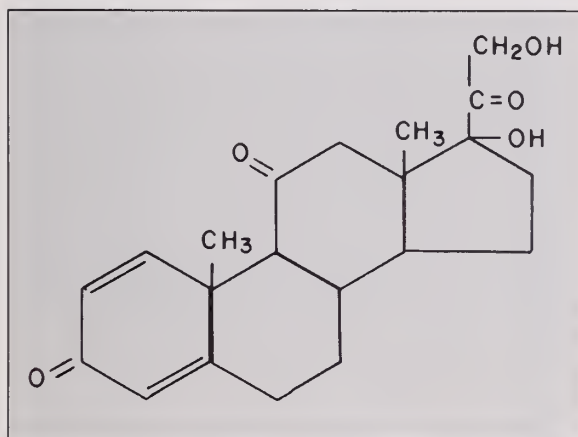


Fig 3. Structure of prednisone.

It has been suggested that glucocorticoids also suppress inflammation by the stabilization of lysosome membranes, thus preventing the release of hydrolytic enzymes. Glucocorticoids appear to oppose the effects of kinins and vasoactive amines in promoting capillary permeability and interstitial edema. Inhibition of prostaglandin synthesis also may be an important factor in the inhibition of inflammation.

Although these metabolic effects of glucocorticoids are useful in the suppression of in-

flammatory activity in certain diseases, they also promote infection by the suppression of physiologic defense mechanisms.

C. Glucocorticoid Effect on Mineral Metabolism

Glucocorticoids will suppress maturation of the skeleton as well as decrease linear growth. This may be secondary to inhibition of growth-hormone-induced synthesis of somatomedin. In addition, glucocorticoids may decrease skeletal osteoblastic activity.

Vitamin D activity is inhibited by steroids. The effect may be mediated by a suppression of hepatic 25-hydroxylase activity as well as inhibition of vitamin D activity at the cellular level.

Chronic glucocorticoid therapy can be associated with growth retardation in children and the development of osteoporosis in adults.

D. Glucocorticoid Effect on Sodium and Potassium

Cortisol has moderate sodium-retaining activity by its effect on renal mineralocorticoid receptors. Halogenated steroids such as fluorocortisol (Flurinef®) have increased glucocorticoid and mineralocorticoid activity when compared to cortisol.

Prednisone and prednisolone have a 1, 2 double bond that markedly decreases the sodium-retaining characteristics of these steroids.

II. STRUCTURE OF GLUCOCORTICOIDS

Glucocorticoids contain the common steroid nucleus shared by adrenal corticosteroid hormones (Fig 1). Glucocorticoids have a 2-carbon chain at the 17-carbon position and thus are termed C-21 steroids. C-21 steroids that have a hydroxy group at the 17 position are classified as 17-OH steroids.

The structure of cortisol is shown in Figure 2. The groups essential for glucocorticoid or anti-inflammatory activity are (1) C=O at the C3 position, (2) C4-5 unsaturated double bond, (3) 11-OH group, and (4) 17-OH group.

Steroidal analogues must contain the above groups to exhibit anti-inflammatory activity; however, other structural changes may alter the biological activities. For example, prednisone (Fig 3) has a C1-2 double bond that enhances anti-inflammatory activity while decreasing mineralocorticoid activity.

Table 1 lists the commonly used steroidal analogues and their comparative potencies.

Table 1. — Comparative Biological Activities of Glucocorticoids

Steroid	Anti-Inflammatory Activity	Mineralocorticoid Activity	Dose
Cortisol	1.0	2+	20.00 mg
Cortisone	0.8	2+	25.00 mg
Prednisone	3.5	1+	5.00 mg
Prednisolone	4.0	1+	5.00 mg
Methylprednisolone	5.0	0	4.00 mg
Dexamethasone	30.0	0	0.75 mg

The biological activities of the glucocorticoids listed in Table 1 are dependent not only upon the intrinsic molecular steroid structure, but also on the transport in the plasma to binding proteins. Cortisol is 95% bound to an alpha globulin, corticosteroid binding globulin (CBG). The unbound portion is believed to be the biologically active hormone. If the plasma concentration of cortisol exceeds 25 to 30 mg%, the steroid will reversibly bind to albumin, of which 75% will be bound and 25% will be free or unbound. Steroid analogues basically are more loosely bound to CBG or albumin than is cortisol, and this may be responsible for their increased biological potency and tendency to produce cushingoid side effects at lower dosage.

Steroids are metabolized in the liver by conjugation with glucuronic acid and then are excreted by the kidney.

III. CONTROL MECHANISM OF GLUCOCORTICOID SECRETION

Adrenal glucocorticoid secretion is under the control of pituitary ACTH secretion, which itself is under the putative hypothalamic releasing factor (CRF). Under normal circumstances, cortisol and ACTH interact in a negative feedback system in which decreasing cortisol levels "signal" ACTH release with subsequent restoration of cortisol secretion. Conversely, elevated cortisol levels decrease CRF and ACTH secretion. Although the anatomic site of cortisol-induced control of ACTH secretion is under dispute, it is likely that both the hypothalamus and the pituitary are responsive to cortisol levels. It is likely that ACTH and CRF alter their own secretion by "short" and "ultra-short" feedback loops; however, the clinical significance of these effects is unknown.

Both ACTH and cortisol are secreted in pulses or episodic secretory events; thus, a single blood sample for ACTH or cortisol is highly dependent upon the timing of the last secretory event. In times of stress, infection, or

major operations, the negative feedback system may convert to an "open" feedback system in which increased ACTH secretion is necessary to produce increased cortisol secretion. Figures 4 and 5 illustrate these relationships.

IV. CLINICAL USE OF GLUCOCORTICOIDS

Glucocorticoids are used either for replacement therapy for the patient with inadequate adrenal hormone secretion (adrenal insufficiency) or as pharmacological therapy for anti-inflammatory or other biological activities.

As the daily cortisol production is approximately 10 to 25 mg per 24 hours or 10 to 15

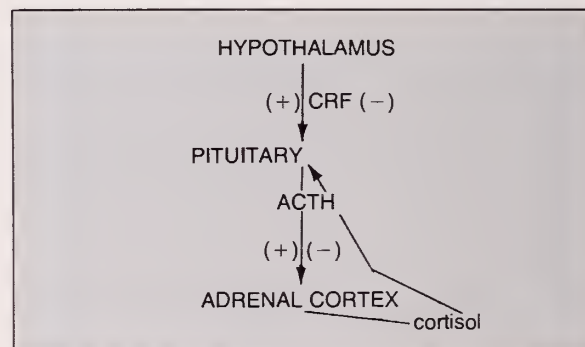


Fig 4. Hypothalamus-pituitary-adrenal relationships in the stable non-stressed patient.

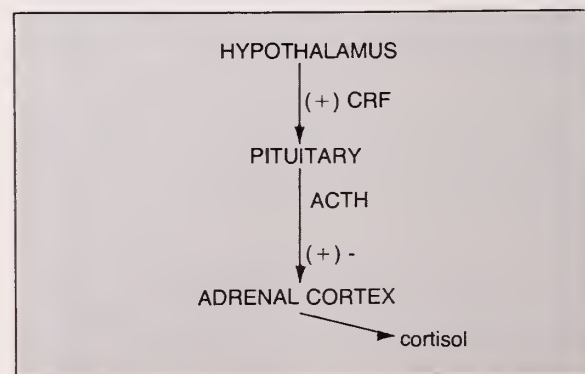


Fig 5. Hypothalamus-pituitary-adrenal relationships in the stressed patient.

Table 2. — Estimated Daily Replacement Doses and Schedules of Glucocorticoids

Steroid	Morning Dose	Evening Dose
Cortisol	20.0 mg	10.0 mg
Cortisone	25.0 mg	12.5 mg
Prednisone	5.0 mg	2.5 mg

mg daily per m², daily replacement dose of glucocorticoids is usually given at comparable levels. Generally, cortisol (hydrocortisone), cortisone, or prednisone are given in divided dosages as illustrated in Table 2.

Although methylprednisolone and dexamethasone do provide potent glucocorticoid activity, they are usually not given to patients for replacement therapy, as they frequently cause cushingoid complications even at low dosage. This may be due to decreased plasma protein binding with subsequent increased "free" or biologically active steroids.

V. GLUCOCORTICOID REPLACEMENT THERAPY

Replacement therapy for patients with adrenal insufficiency during acute stress or surgical procedures requires modification. For moderate illness, oral replacement therapy two to three times the usual dose is frequently sufficient. If the patient is not able to ingest medication, then parenteral steroids must be administered immediately. A schedule for the treatment of acute adrenal insufficiency is given in Table 3. Usually 100 mg of cortisol is infused over the first one to two hours. Then, a continuing infusion of cortisol and saline is given for the next 24 hours. A total of 300 to 400 mg of cortisol and 3 to 6 liters of saline is frequently required during the first 24 hours. (Table 3).

In the first 24 hours, approximately 300 to 400 mg of cortisol and four to six liters of saline may be needed. If the patient is stable, total daily glucocorticoids can be reduced 30% each day. It is important to note that supplemental mineralocorticoid administration is usually not required until the total daily dose of cortisol is less than 100 mg.

VI. PREPARATION OF THE ADDISONIAN PATIENT OR STEROID-TREATED PATIENT FOR MAJOR SURGERY

It is important to provide the Addisonian patient or steroid-treated patient with adequate glucocorticoid coverage during major surgery. In addition, patients who have been treated with systemic steroids at replacement dose levels for a total of ten days within the previous six to twelve months should also be treated, as they may not have adequate ACTH reserve in response to stress.

Although many replacement schedules are adequate, it is suggested that a total of 200 to 300 mg of cortisol be administered during the day of surgery. Usually patients are given a source of intramuscular cortisone acetate prior to the day of surgery to provide a continuous source of glucocorticoids in case of interrupted intravenous therapy. A sample program is listed below:

- Twenty-four hours prior to surgery give 100 mg of intramuscular cortisone acetate.
- On the day of surgery, give 100 mg of intramuscular cortisone acetate and place 100 mg of cortisol in intravenous fluids to be continuously administered during surgery.
- Immediately after surgery, place 50 mg of cortisol in each 1,000 ml of intravenous fluids.

Table 3. — Schedule for Treatment of Acute Adrenal Insufficiency

Hours 0-1:	Give 100 mg cortisol intravenously in a bolus injection. Administer 100 ml of D5/normal saline with 100 mg of cortisol. Obtain blood samples for CBC, electrolytes, renal function, and cortisol (results to be obtained later for confirmation of diagnosis). Chest x-ray, EKG, and appropriate cultures may determine precipitating cause of adrenal insufficiency.
Hours 1-6:	Continue with intravenous infusion of saline with cortisol and give at rate of 1,000 ml every 4-6 hours. Obtain repeat electrolytes, glucose, and BUN. Administer 100 mg intramuscular cortisone acetate (to be used as depot source of glucocorticoid in case intravenous infusion is accidentally interrupted).
Hours 6-24:	Continue with saline and intravenous steroids. Repeat electrolytes, glucose, and renal function. Intravenous fluids should include 1,000 ml normal saline with 50-100 mg of cortisol every 4-6 hours.

- d. Twenty-four hours after surgery, give a total of 200 mg glucocorticoids to be equally divided between intravenous and intramuscular administration.

Assuming no complications, glucocorticoids thereby can be rapidly decreased to preoperative levels. It is important to monitor electrolytes and glucose levels closely.

Alternate-day therapy is frequently employed in the treatment of certain disease states to minimize side effects of glucocorticoids and to reduce suppression of the endogenous hypothalamus pituitary adrenal axis. A steroid with biological activity lasting 12 to 24 hours should be administered. This usually would include cortisol, cortisone, or prednisone. On alternate days no endogenous steroids are given in order to allow the endogenous hypothalamic pituitary adrenal axis to function. This type of therapy can be effective, although close monitoring of the disease activity on the "alternate day" must continue.

Frequently it is necessary to convert a patient from daily glucocorticoid therapy to alternate-day therapy. This can be achieved by progressively increasing steroid dosage on the one day while progressively decreasing the steroid dosage on the alternate day over one to two weeks. Then a program of progressive dose reduction can be initiated. It is important to support the patient with alternative therapy during the "off" steroid day and to be prepared to

increase steroid dosage if the disease activity continues. An example of the conversion of a patient on a daily dose of 40 mg prednisone to an alternate-day course is given in Table 4.

The dose of 75 mg of prednisone could then be alternated with a dose of 5 mg for one week. The next week a dose of 70 mg of prednisone could be alternated with a dose of 5 mg. The dose can be progressively decreased until it is estimated that the patient can tolerate the complete elimination of steroids on the alternate day. It also would be important to lower the steroid dosage on the therapy day to as low a dose as possible, consistent with satisfactory suppression of the disease activity. It is hoped that this program will minimize side effects of longterm glucocorticoid administration and facilitate maintenance of normal endogenous steroid secretion.

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Table 4. — Schedule for Conversion of Daily Steroid Administration to Alternate-Day Administration

Day	Steroid Dose
1	40 mg prednisone
2	50 mg prednisone
3	30 mg prednisone
4	60 mg prednisone
5	20 mg prednisone
6	70 mg prednisone
7	10 mg prednisone
8	75 mg prednisone
9	5 mg prednisone

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Maternal Phenylketonuria

Today, an increasing number of women who were successfully treated for phenylketonuria (PKU) have reached childbearing age. Should these women wish to become pregnant, they should know that phenylalanine crosses the placenta and exposes the fetus to abnormal levels. These babies are at risk of developing several types of birth defects. Therefore, a return to the restricted PKU diet is necessary before conception, to assure the control of phenylalanine levels.

PKU is an inherited, metabolic disorder characterized by the inability to metabolize phenylalanine, an amino acid. An accumulation of phenylalanine in the brain will result in mental retardation.

Treatment for PKU is a diet restricting high protein foods containing phenylalanine. Special dietary formulas are used as supplemental sources for essential amino acids. Although

pregnancy outcomes are not entirely predictable, studies have shown a trend toward healthier infants from PKU mothers who followed dietary treatment during pregnancy.

Unfortunately, the formula used to supplement the diet is extremely expensive, and compliance with the diet is a problem. The expense, the need to begin the diet before becoming pregnant, and the months it may take to become pregnant all weigh against adherence to the diet.

Women who are pregnant and need PKU formula may be eligible to receive some formula from the Oklahoma State Department of Health. First, however, any woman who suspects she has or has had PKU must be evaluated by one of the two PKU centers in the state: GEM Clinic, Oklahoma Children's Memorial Hospital, Oklahoma City; or Child Study Clinic, Children's Medical Center, Tulsa.

DISEASE	September 1984	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	4	3	19
CAMPYLOBACTER INFECTIONS	14	143	162	—
ENCEPHALITIS, INFECTIOUS	3	19	31	23
GIARDIA INFECTIONS	37	186	164	—
GONORRHEA (Use ODH Form 228)	1085	9699	11759	14234
HAEMOPHILUS INFLUENZAE INVASIVE DISEASE	13	143	106	—
HEPATITIS A	45	345	393	325
HEPATITIS B	14	127	240	185
HEPATITIS, NON-A NON-B	6	37	38	—
HEPATITIS UNSPECIFIED	7	78	147	154
MEASLES (RUBEOLA)	0	8	1	142
MENINGITIS, ASEPTIC	18	82	301	139
MENINGITIS, BACTERIAL (non-meningococcal, non H. Influenzae)	1	35	58	39
MENINGOCOCCAL INFECTIONS	0	23	27	23
PERTUSSIS	25	236	237	90
RABIES (Animal)	4	87	91	195
ROCKY MOUNTAIN SPOTTED FEVER	13	109	207	99
RUBELLA	0	0	0	2
SALMONELLA INFECTIONS	55	307	429	325
SHIGELLA INFECTIONS	31	157	166	209
SYPHILIS (Use ODH Form 228)	14	144	175	125
TETANUS	1	2	0	0
TUBERCULOSIS	12		159	188
TULAREMIA	1	17	27	21
TYPHOID FEVER	1	3	3	0

Diseases of Low Frequency	Total to Date This Year	
ACQUIRED IMMUNE DEFICIENCY SYNDROME	6	
BRUCELLOSIS	4	
LEGIONNAIRES DISEASE	18	
MALARIA	7	
REYE'S SYNDROME	14	
TOXIC SHOCK SYNDROME	13	
RABIES		
GRADY	SKUNK	1
OKMULGEE	SKUNK	1
TULSA	BAT	2



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New pediatric subspecialty arrives at OKC hospital

Robert W. Pryor, MD, has joined the medical staff of Oklahoma Children's Memorial Hospital (OCMH), Oklahoma City, as head of the pediatric intensive care unit. One of the few intensivists in the country and the only one in the state, Dr Pryor is specially trained to deal with the multisystem failure that often occurs in children who are admitted to an intensive care unit (ICU).

Dr Pryor completed his fellowship in pediatric intensive care at Texas Children's Hospital, Baylor Medical Center, Houston, in one of the few programs in the country that offers such training.

"The best person to take care of a child's heart problems is a pediatric cardiologist; the best person to take care of kidney problems is a nephrologist; and for children who are victims of trauma, it is the pediatric surgeon. Like an anesthetist, I take care of the life functions while specialists take care of the specifics," he explains.

This new pediatric subspecialty excludes care of the critically ill newborn, for whom there are trained specialists, neonatologists.

Dr Pryor will be melding his approach, that of a multiorgan system of care, with the treatment given in the ICU. One of his first priorities is establishing a three-tiered training program for nurses to offer them opportunities to attain successive levels of intensive care expertise. He also plans to conduct research into new ways of treating critically ill children. Part of his research interest is focused on Reye's Syndrome and other types of brain injury.

The ICU at OCMH is a 17-bed unit that admits approximately 840 children each year. As with all intensive care units, there are peak

times during the year when beds are full.

"We are approaching one of those times now, with respiratory problems occurring more frequently in winter," Dr Pryor notes.

Critical respiratory illnesses, such as those occurring with near drownings, septic shock, lung diseases, and pneumonia, account for the largest number of admissions to a pediatric ICU, he says. □

Feline lipid material spurs growth of new blood vessels

Researchers have found a way to rejuvenate tissue by spurring the growth of new blood vessels, a procedure that may have tremendous therapeutic value.

In the first study of its kind, Harry S. Goldsmith, MD, and colleagues of Boston University School of Medicine caused new blood vessels to grow in the corneas of rabbits, using a substance derived from the omentum of cats. The omentum is part of the membrane that covers organs in the abdominal cavity.

Writing in the *Journal of the American Medical Association (JAMA)*, Oct 19, the researchers describe how they extracted lipid material from the omentum, purified it, and injected it into the corneas of healthy rabbits. They report that a complex network of new blood vessels had formed within the corneas after seven to ten days.

The researchers are enthusiastic about the technique because of its potential use in treating many conditions that could be improved with increased blood supply. Among these are

Depression in MS patients more than just “reactive”

Patients with multiple sclerosis (MS) show a significantly higher rate of depressed affective disorders than patients with certain other central nervous system diseases, according to a report in the October *Archives of Neurology*.

Randolph B. Schiffer, MD, and Haroutun M. Babigian, MD, of Strong Memorial Hospital, Rochester, NY, conducted a retrospective study of patients with MS, temporal lobe epilepsy (TLE), and amyotrophic lateral sclerosis (ALS) who had been hospitalized between 1965 and 1978. The researchers identified records of 368 MS patients, 402 TLE patients, and 124 ALS patients. The patient record groups then were matched against the Monroe County Psychiatric Register, a computerized summary of psychiatric visits to all mental health facilities within the county.

“Prevalence rates for psychiatric contact were not significantly different between MS and TLE (19.3% vs 22.9%), but both were higher than the prevalence rate for ALS (4.8%),” they report. “When behavioral patterns were assessed, patients with MS demonstrated a significantly higher rate of depressed affective disorders (61.97% of register matches) than patients with the other two diseases,” they add.

The researchers suggest that the increased rate of depressive diagnoses among MS patients cannot be dismissed as “reactive” depression in the face of an unpredictable and chronic disease. “Temporal lobe epilepsy can also be chronic and

unpredictable, yet a much lower rate of depressive features is manifest in this disease,” they point out.

The experience of ALS patients also undermines psychodynamic hypotheses for depression related to disease. “Despite the prognosis in ALS (major disabilities and death), of 124 patients only 6 had contacts in the psychiatric register.”

The authors suggest that the most likely explanations for the high rate of depressive diagnoses in MS include: “the structural involvement of limbic regions by demyelination (the essential biological damage in MS), shared genetic vulnerabilities both to depression and MS, and selective alterations of monoamine metabolism within the central nervous system.” □

Narcotics officers praise AMA for drug abuse fight

The International Narcotic Enforcement Officers Association, Inc. (INEOA) has given a “Special Award of Honor” to the American Medical Association (AMA) for its leadership in the fight against prescription drug abuse.

The prestigious award was presented October 8, 1984, at ceremonies in Albany, NY, during the INEOA's 25th national conference. The enforcement group commended the AMA for its contributions in educating medical professionals and the public about the prescription drug abuse problem.

Singled out for praise was the work of the Informal Steering Committee on Prescription Drug Abuse, an expert group assembled by the AMA in 1981. Its membership represents health care providers, drug manufacturers, pharmacists, and drug regulatory and law enforcement agencies.

The informal committee has developed the Prescription Abuse Data Synthesis (PADS) model for assessing drug abuse and diversion within a state. The PADS model helps state drug agencies use a variety of local, state, and federal data sources to distinguish the particular drugs abused in the state, pinpoint the locations of the most serious abuse and diversion activities, and identify individual practitioners and dispensers who may be involved in the diversion. □

New blood vessels (continued)

wound healing, bone fracture repair, burns, and ischemia (loss of blood in certain organs and tissues).

Conversely, they say, if an inhibitor of the process can be found, it may be a possible means of reducing tumor growth by cutting off the blood supply.

Previous studies showed that the omentum and some other tissues were angiogenic (capable of producing blood vessels), but no one had yet initiated and sustained the process with a single injection of material. One advantage of using omentum, the researchers say, is that it is readily available in adequate supply. Its angiogenic nature was observed in earlier studies when it was transplanted to the surface of the brains of dogs and monkeys. □

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Three state doctors to be inducted as ACP Fellows

Three Oklahoma physicians have been elected Fellows of the American College of Physicians (ACP) and will be formally inducted at the College's annual scientific meeting in Washington, DC, March 28-31, 1985.

The newly elected Fellows are Richard T. Coussons, MD, and Laura I. Rankin, MD, Oklahoma City, and James A. Young, MD, Tulsa.

Election to Fellowship in the national medical organization signifies that a physician has been recognized by colleagues as having attained a high level of scholarship and achieve-

ment in internal medicine. Usually Fellows have authored articles in medical journals, presented papers at medical meetings, been involved in the teaching of young doctors and medical students, and made other notable contributions to the advancement of medical science and practice.

The ACP has some 60,000 members — Associate Members, who are physicians-in-training or medical students; Members, who are practicing physicians; and Fellows. □

Injured drunk drivers get to ER, beat DUI conviction

Most alcohol-impaired drivers who are injured seriously enough to require hospitalization are not convicted for drunk driving, according to a report in the *Journal of the American Medical Association* (JAMA, Oct 12).

Kimball I. Maull, MD, of the University of Tennessee, Knoxville, and colleagues studied 56 such drivers during a three-year period ending October 1982. All had blood alcohol levels higher than 0.15%, with a mean of 0.24%. There were 47 men and 9 women ranging in age from 16 to 59 years. The study revealed that in 32 of the cases, the investigating police officer reported that the driver had been drinking, and in 51 of the cases, the officer believed the alcohol-impaired driver had caused the crash. In 33 cases, the officer indicated that charges would be filed.

Convictions were attained for only 19 subjects, however (most for reckless driving), and 37 subjects were either not charged or not convicted. There were no convictions for driving under the influence of alcohol (DUI).

The researchers offer several possible explanations for this apparent immunity to conviction. They cite police skepticism about judicial support, empathy for the driver, view of loss of license as too severe a penalty, and the administrative burden of the charging, arraignment, and court procedure.

Another reason for the low rate of conviction among injured alcohol-impaired drivers is that the chain of evidence is broken, the researchers point out. If the driver is taken from the scene by ambulance, there is no opportunity for the officer to check for alcohol impairment.

(continued)



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With the cyclical nature of real estate at a low point and the vast expansion of the Vail area putting more product on the market, prices are very reasonable. Vacation homes vary in price from ninety thousand dollars for a two bedroom condo on up. It is possible to buy a centrally located duplex unit of three or more bedrooms in the two to three hundred thousands. A five-person partnership would need individual down payments in the fifteen thousand range for a three hundred thousand dollar unit; interest and property taxes are tax deductible, of course.

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For further information, write to Mary Ellen or Gerry Turner, Box 1242, Vail, CO 81658 or call (303) 949-4077.

* The IRS would probably treat a purchase by your professional corporation as a purchase by you. Check with your accountant.

Drunk drivers (continued)

Further, blood alcohol concentrations determined by medical staff are often inadmissible as evidence to support charges of driving under the influence. The researchers note that Colorado passed a law in 1982 that allows emergency medical technicians to take blood alcohol samples when requested by law enforcement officials.

The researchers stress the need for similar changes in other states. They point out that the health and safety of the guilty driver is at stake, as well as the safety of other drivers if he retains his license. "Trauma care personnel, especially surgeons, should be aware that trauma is often the first manifestation of alcohol dependency. Patient survival may ultimately depend more on alcohol rehabilitation than on initial trauma management."

Elsewhere in the same issue, George Lundberg, MD, editor of *JAMA*, also proposes that court rules of evidence be modified to allow the introduction of blood alcohol examination results from clinical laboratories. □

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Enrollment slowing, aid for students dwindling

More medical students and residents than ever before are in the medical education system, but they are receiving less financial aid, according to the 84th Annual Report on Medical Education in the United States, published in the *Journal of the American Medical Association (JAMA)*.

Although the numbers continue to increase, the rate has slowed considerably. Total enrollment in US medical schools rose by less than 1% in 1983-1984, and first-year enrollment has been declining for the past three years, according to the report.

Fifty-two percent of the 1984 medical school graduates accepted residency positions in family practice, internal medicine, or pediatrics programs. The total number of residents has increased steadily, with 72,397 participating in accredited programs in 1983.

At the same time, financial assistance to medical students from all sources declined by approximately 6%. (Figures for 1982-1983 are the most recent available, and this school year is the first to show a decline since 1954.) Schol-

arship funds decreased 8%; loan funds decreased 4%. The average education debt reported by senior students was nearly \$24,000, and more than 13% of the graduating class in 1983 reported debts of \$30,000 or more. Residency programs are also threatened by the reimbursement system of the diagnosis-related groups. DRG payment mechanisms may lead to a decrease in a major source of financial support.

The profile of medical students is also changing; one in three new medical students is a woman, and approximately 16% are members of ethnic groups. Blacks make up a little more than 5% and Asians another 5%. Twenty-four percent of resident physicians are women; approximately 5% of the total are black.

More than 96% of entering medical students have completed four or more years of college study. Approximately 45% of them obtained college grade point averages of 3.6 or higher. There were 9.1 applications per person to medical schools for 1983-1984, and one of every two applicants was accepted. □

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Patients respond faster with continuity of care

Continuity of patient care leads to greater patient satisfaction, shorter hospitalization, and fewer emergency hospital admissions, according to a report in the *Journal of the American Medical Association* (JAMA, Nov 2).

John H. Wasson, MD, and colleagues conducted the study of outpatient care at the Veterans Administration Medical and Regional Office Center in White River Junction, Vt. Participants included 776 men age 55 years and older. Two-thirds of the patients were randomly assigned to medical care professionals who would provide ongoing care, and the other one-third to different providers at follow-up visits. Neither the patients nor the providers of care knew of these assignments.

The researchers note that there was a significant difference in the outcome for the two groups. During an 18-month evaluation period,

those receiving continuity of care had fewer emergency admissions (20% vs 39%) and a shorter average length of hospitalization (15.5 days vs 25.5 days). These patients also perceived that their providers were more knowledgeable, thorough, and interested in patient education.

In an editorial on the subject, Edward W. Campion, MD, of Massachusetts General Hospital in Boston says, "Continuity of care is one of those values that no one actually opposes but that is, nonetheless, often sacrificed quietly, usually in the name of efficiency." He adds that patients "too often are adrift without someone whom they can call 'my doctor, through thick and thin.'"

The Vermont study indicated that patients, regardless of their medical problem, responded better when they could identify a single provider of care. Campion concludes, "The more complex a case, the greater the need for that primary physician as continuous overseer, coordinator and advocate." □

In Memoriam

1983

Marque O. Nelson, MD	December 24
Park H. Medearis, MD	December 26
Charles S. Beaty, MD	December 28

1984

Jack H. Foertsch, MD	January 19
Thomas L. Ozment, MD	February 11
Thomas L. Foster, MD	February 25
Robert W. Lowrey, MD	February 27
Ella Mary George, MD	March 1
Kemper C. Lain, MD	March 8
William R. Cheatwood, MD	March 12
William A. Dean	March 19
Charles H. Cooke, MD	March 23
Donald J. Worden, MD	April 1
William I. Jones, MD	April 3
Paul Kernek, MD	May 9
Leon C. Freed, MD	June 12
William D. Bolene, MD	June 18
Lee K. Emenhiser, MD	June 26
Grace C. Hassler, MD	July 14
Carryl W. Wiggins, MD	July 17
Solomon Papper, MD	August 19
Kirk T. Mosley, Jr, MD	August 26
Ingvald John Haugen, MD	September 1
Hugh H. Monroe, MD	September 9
Martin H. Bartlett, MD	September 10
Oliver H. Patterson, MD	October 13

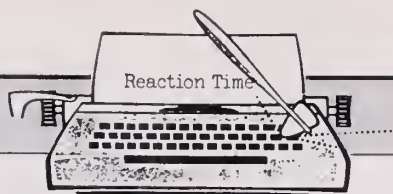
Deaths

MARTIN H. BARTLETT, MD 1907 - 1984

Martin H. Bartlett, MD, Sapulpa, a Life Member of the Oklahoma State Medical Association, died September 10. Born in Stillwater, Dr Bartlett was graduated from the University of Texas Medical Branch, Galveston, in 1944. He specialized in internal medicine and practiced some thirty years in New Mexico before moving to Sapulpa in 1979.

OLIVER H. PATTERSON, MD 1921 - 1984

Oliver H. Patterson, MD, Sapulpa general practitioner, died in a plane crash in the Gulf of Mexico on October 13. He was 63. Dr Patterson was born in Jefferson City, Mo, and served in the Navy Air Corps during World War II. He was graduated from the University of Oklahoma College of Medicine in 1955 and established his practice in Sapulpa in 1956. He had recently retired from medicine in order to pursue his interest in flying.



"Panacea" gets mixed reviews

To the editor — When you awaken some night soon to the roar of a threatening mob bent on bodily harm or possible lynching and look out the window and find your yard and the street are filled with bronchoscopists, esophagoscopists, radiologists, coronary artery viewers and shunters, and perhaps a sprinkling of physiotherapists and acupuncturists, please realize there is one individual who is applauding your "Panacea Proposition" and who will offer you sanctuary if you manage to escape.

Of course, this solution is not quite as simple as you make it sound and in this age of "gold," it is not going to occur. However, I think it is a wonderful idea and just maybe as time goes on, others besides you and me might think it is a panacea indeed, and not just the idle musings of an editor.

W. W. Rucks, Jr, MD
Oklahoma City

To the editor — Your recent editorial [October] in the Journal of the Oklahoma State Medical Association drew my attention, and I feel compelled to make these comments. In the fourth paragraph of your editorial, there are clearly some activities which involve patient care that were not in your list. There is no question that a detailed history, a meticulous painstaking physical examination and becoming knowledgeable about the patient's lifestyle, fears and worries are important aspects in any patient-physician relationship. Just as important is doing a meticulous painstaking operative procedure which allows a patient to improve his lifestyle, be relieved of many fears and worries and to accomplish some of his dreams. The 4, 6, 8 and 10 hour operative procedures which I do on a daily basis clearly qualify as reimbursable items even though they were not included in your list. I could not disagree with you that we have made some grievous errors in the relative value scale system, but I am not about to suggest to you that a routine history and physical examination are equal to four or five hours which are frequently required to correct many cardiac defects.

Ronald C. Elkins, MD
Oklahoma City

To the editor — Your editorial in the October 1984 Journal was excellent. I couldn't agree with you more both in your assumptions and what would be the probable outcome.

Thank you for your "voice in the wilderness."

Curtis E. Harris, MD
Oklahoma City

■ *The JOURNAL encourages comment from readers on any subject of interest to physicians in Oklahoma.*

Book Reviews

Infectious Diseases of Children. Edition 7. By Saul Krugman and S.L. Katz. St Louis: C. V. Mosby Co., 1981, pp 607, price \$39.95.

This is the seventh edition of this book, originally published in 1958. The relatively large number of editions in such a short time attest to its popularity and usefulness. The sixth edition added Samuel L. Katz as a third author. Because of the untimely death of Robert Ward, the seventh edition is under the direction of two authors again.

Perhaps the most attractive feature of this book has been and continues to be the clear form of its presentations. The descriptions of various clinical infections are pertinent and are supplemented by excellent photographs and graphs. Each clinical disorder has a well-done section on differential diagnosis.

Specific points of strength include very good coverage of the more common infections; up-to-date information on disorders such as otitis media and viral hepatitis; a very useful section on the differential diagnosis of diseases accompanied by exanthems; a separate chapter incorporating recommendations on immunization; and a reliable index.

There are four completely new chapters:

Book Reviews (continued)

"Infantile Botulism," "Osteomyelitis and Pyogenic Arthritis," "Urinary Tract Infections," and "Otitis Media." Two of these chapters were written by other authors. Considerable changes are apparent in most chapters, with recent developments and new methods of management. Virtually every chapter has fresh references, with many of the works published in 1980.

Although no book can cover all topics, it would be helpful if there were a more consolidated discussion of chlamydia infections, anaerobic infections, and Reye's syndrome.

The weaknesses of this book are far outweighed by its strengths. It is useful for readers at all levels of expertise — students, house officers, and practitioners.

*Harris D. Riley, Jr, MD
Children's Memorial Hospital
University of Oklahoma Health Sciences Center
Oklahoma City, Oklahoma*

Interventional Radiology of the Abdomen. By J. T. Ferrucci, Jr, MD, and J. Wittenberg, MD. Baltimore: The Williams and Wilkins Company, 1981. Pp 243. Price, \$39.00.

This short text by Joseph T. Ferrucci, Jr, MD, and Jack Wittenberg, MD, of Massachusetts General Hospital is one of several publications fostered by the recent interest in interventional radiology. This book was designed primarily as a technical manual and covers all the major interventional radiographic modalities in the abdomen, postoperative instrumentation of the biliary tract, percutaneous biliary drainage,

percutaneous tumor biopsy, percutaneous abscess drainage, and intestinal intubation procedures. Chapters also cover the background of abdominal interventional radiology and general patient care, pharmacologic agents in radiographic therapy of alimentary disorders, and nursing care for abdominal interventions.

Although the majority of the text is written by the principal authors, the knowledge of many collaborators is called upon in those areas of their greatest expertise.

At the end of the major chapters a brief overview is provided followed by a "hands-on" case presentation which the reader is provided with a challenging case example of the procedure previously discussed.

Although some theoretical and background information is provided, this text is structured for those individuals desirous of a formulated approach to most abdominal radiographic interventional manipulations.

As in every rapidly evolving field, some refinements have occurred in the years since this book was written. There are now more numerous and larger series available. In addition, a greater variety of commercially manufactured instruments and kits are now available from which to choose.

I would recommend this text for the radiologist or clinician desirous of an inexpensive publication weighted heavily toward technique in radiographic abdominal intervention but mindful of the changes which have occurred since the publication was written.

*Tim Tytle, MD
Chief, Special Procedures, VA Hospital
Department of Radiological Sciences
Oklahoma Memorial Hospital
Oklahoma City, Oklahoma*

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(B) Book Review	(L) Letter
(C) Commentary	(N) News
(D) Death	(P) Picture
(E) Editorial	(S) Scientific
(H) State Health Dept	(SA) Special Article

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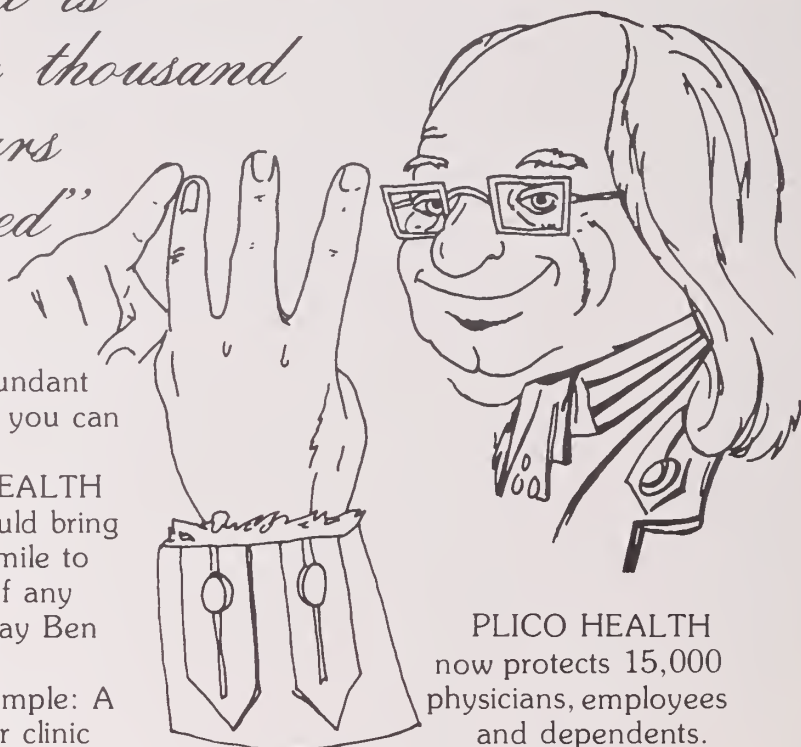
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Patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin Tablets are added.

The antipyretic, anti-inflammatory activity of Motrin Tablets may mask inflammation and fever.

As with other nonsteroidal anti-inflammatory drugs, borderline elevations of liver tests may occur in up to 15% of patients. These abnormalities may progress, may remain essentially unchanged, or may be transient with continued therapy. Meaningful elevations of SGPT or SGOT (AST) occurred in controlled clinical trials in less than 1% of patients. Severe hepatic reactions, including jaundice and cases of fatal hepatitis, have been reported with ibuprofen as with other nonsteroidal anti-inflammatory drugs. If liver disease develops or if systemic manifestations occur (e.g. eosinophilia, rash, etc.), Motrin should be discontinued.

Drug interactions: Aspirin: used concomitantly may decrease Motrin blood levels.

Coumarin: bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions: The most frequent type of adverse reaction occurring with Motrin is gastrointestinal of which one or more occurred in 4% to 16% of the patients.

Incidence Greater than 1% (but less than 3%)—Probable Causal Relationship

Gastrointestinal: Nausea* epigastric pain* heartburn* diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). **Central Nervous System:** Dizziness* headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic/Endocrine:** Decreased appetite. **Cardiovascular:** Edema, fluid retention (generally responds promptly to drug discontinuation; see PRECAUTIONS).

Incidence less than 1%—Probable Causal Relationship**

Gastrointestinal: Gastric or duodenal ulcer with bleeding and/or perforation, gastrointestinal hemorrhage, melena, gastritis, hepatitis, jaundice, abnormal liver function tests. **Central Nervous System:** Depression, insomnia, confusion, emotional lability, somnolence, aseptic meningitis with fever and coma. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme, Stevens-Johnson syndrome, alopecia. **Special Senses:** Hearing loss, amblyopia (blurred and/or diminished vision, scotomata, and/or changes in color vision) (see PRECAUTIONS). **Hematologic:** Neutropenia, agranulocytosis, aplastic anemia, hemolytic anemia (sometimes Coombs positive), thrombocytopenia with or without purpura, eosinophilia, decreases in hemoglobin and hematocrit. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure, palpitations. **Allergic:** Syndrome of abdominal pain, fever, chills, nausea and vomiting, anaphylaxis; bronchospasm (see CONTRAINDICATIONS). **Renal:** Acute renal failure in patients with pre-existing significantly impaired renal function, decreased creatinine clearance, polyuria, azotemia, cystitis, hematuria. **Miscellaneous:** Dry eyes and mouth, gingival ulcer, rhinitis.

Incidence less than 1%—Causal Relationship Unknown**

Gastrointestinal: Pancreatitis. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities, pseudotumor cerebri. **Dermatologic:** Toxic epidermal necrolysis, photoallergic skin reactions. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Bleeding episodes (e.g., epistaxis, menorrhagia). **Metabolic/Endocrine:** Gynecomastia, hypoglycemic reaction. **Cardiovascular:** Arrhythmias (sinus tachycardia, sinus bradycardia). **Allergic:** Serum sickness, lupus erythematosus syndrome, Henoch-Schönlein vasculitis. **Renal:** Renal papillary necrosis.

*Reactions occurring in 3% to 9% of patients treated with Motrin. (Those reactions occurring in less than 3% of the patients are unmarked.)

**Reactions are classified under "Probable Causal Relationship (PCR)" if there has been one positive rechallenge or if three or more cases occur which might be causally related. Reactions are classified under "Causal Relationship Unknown" if seven or more events have been reported but the criteria for PCR have not been met.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine so alkaline diuresis may be beneficial.


Dosage and Administration: Rheumatoid arthritis and osteoarthritis: Suggested dosage is 300, 400, or 600 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day. Mild to moderate pain: 400 mg every 4 to 6 hours as necessary.

Caution: Federal law prohibits dispensing without prescription.

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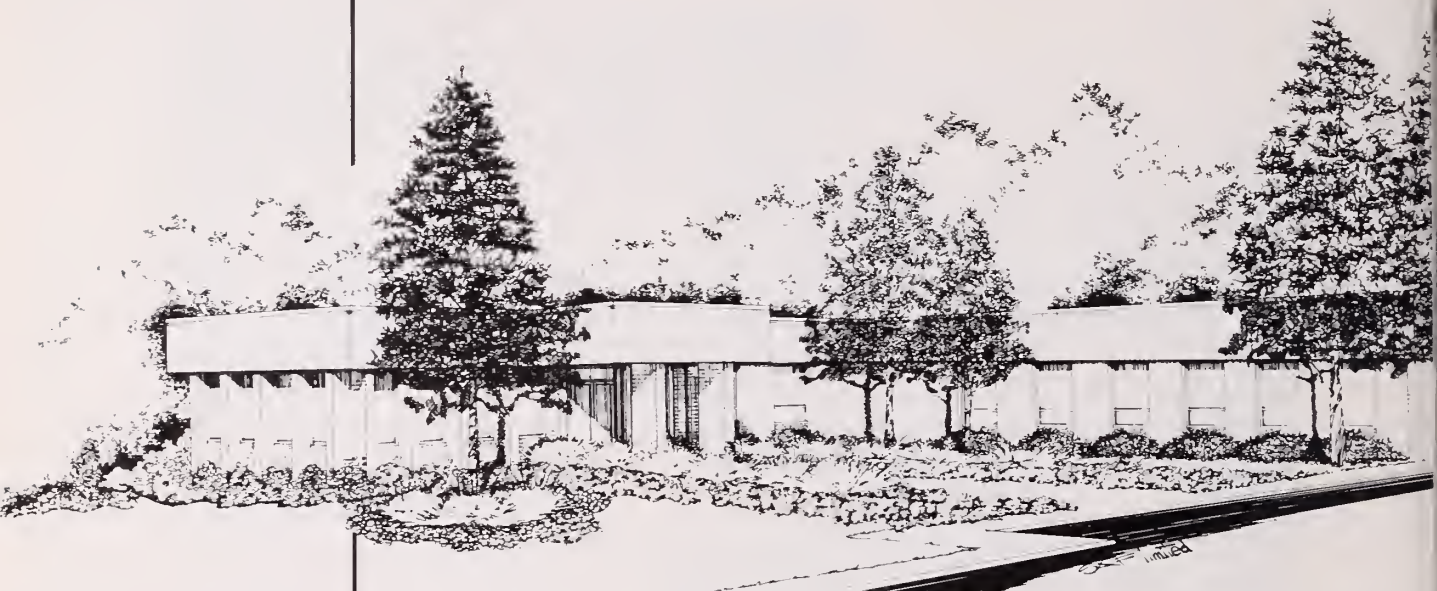


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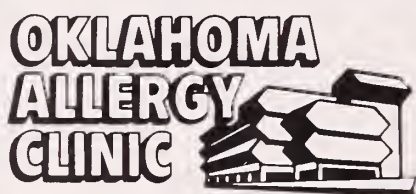
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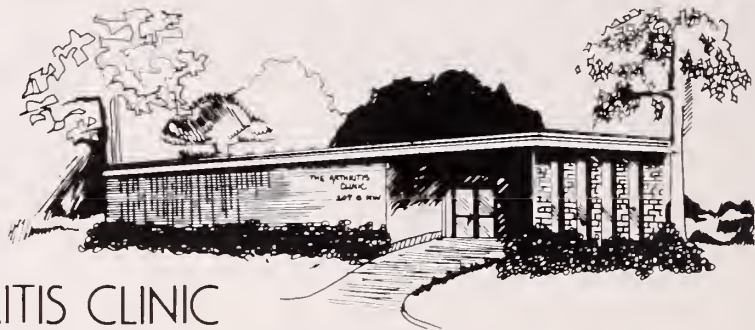
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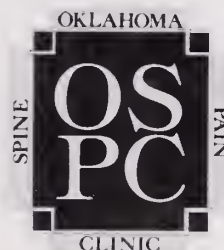
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Footnotes, bibliographies, and legends for illustrations should be submitted on separate sheets, double-spaced. Bibliographies should follow in order of: name and author, title or article, name of periodical with volume number, page and date of publication. These references should be numbered in the sequence in which they appear in the article.

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NEWS

Members of the Oklahoma State Medical Association, the constituent societies of the association, and all readers in general are invited to supply news items of general interest to the profession.

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BACK ISSUES

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■ **Eight state medical societies will have** additional delegates at the 1984 Interim Meeting as a result of an AMA bylaws amendment. Six states — Iowa, Minnesota, Nebraska, North Dakota, Ohio, and Wisconsin — will get one additional delegate each. Illinois and Oklahoma are entitled to two additional delegates each. Under the amendment, a constituent association is entitled to an additional delegate and alternate if 75% or more of its members are also AMA members. An association is entitled to two additional delegates and alternates if all of its members are also AMA members.

■ **A Committee on Young Physicians has** been appointed by the AMA Board of Trustees to identify the concerns of young physicians and make recommendations for encouraging participation in organized medicine.

■ **Direct advertising of prescription drugs** to the public was opposed by two-thirds of the respondents in a public opinion poll conducted by the AMA. When the question was addressed to physicians, 84% expressed opposition and 81% — members and nonmembers alike — said the AMA should take a highly visible public stand on direct advertising proposals. The AMA House of Delegates has taken a position against direct advertising of prescription drugs.

■ **Cost of medical care remains the number one** problem facing medicine, physicians said in a poll conducted by the AMA Department of Survey and Opinion Research. Half of the physicians queried this year said cost was their greatest concern, down slightly from a peak of 58% in 1982. Concern about government regulation, which reached its lowest point in 1982, increased five points in 1983 and an additional four points in 1984. A total of 19% of the physicians said government regulation was the main problem facing medicine.

■ **Two Tulsa dermatologists have been** elected to office in the Oklahoma State Dermatologic Society. Jeff Alexander, MD, will serve as president for 1984-85, and David B. Minor, MD, will act as secretary. The society's annual meeting will be held in Tulsa April 27 and 28, 1985.

■ **Writing in the *Journal of the American Medical Association (JAMA)*** (Nov 2), Richard L. Landau, MD, and James M. Gustafson, PhD, of the University of Chicago, suggest that advances in medical care may have led to confusion about the goals of medicine. Inordinate prolongation of life is not a viable goal, and death itself is not the real enemy of practicing physicians, they say. "The real enemies are disease, discomfort, disability, fear and anxiety."

■ **"Audio Medical News" is increasing** its business and practice management information, emphasizing in-depth feature stories, and expanding news coverage from 30 minutes to 60 minutes. Every two weeks, the American Medical Association (AMA) audiocassette service condenses socioeconomic news from more than 70 medical and nonmedical publications. The subscription rate is \$125 for 24 issues. To subscribe, call the AMA toll-free at (800) 621-8335.

■ **Two new courses have been added** to the AMA's Video Clinic Program, bringing the total number of courses to 36. Added to the continuing medical education videotapes are "Clinical Applications of Diagnostic Imaging" and "Computers in Clinical Practice: An Introduction." Each course includes a color videotape, study guide, self-assessment test, and forms for Category 1 CME credit. The courses are available for rent or purchase. For more information, call toll-free (800) 621-8335.

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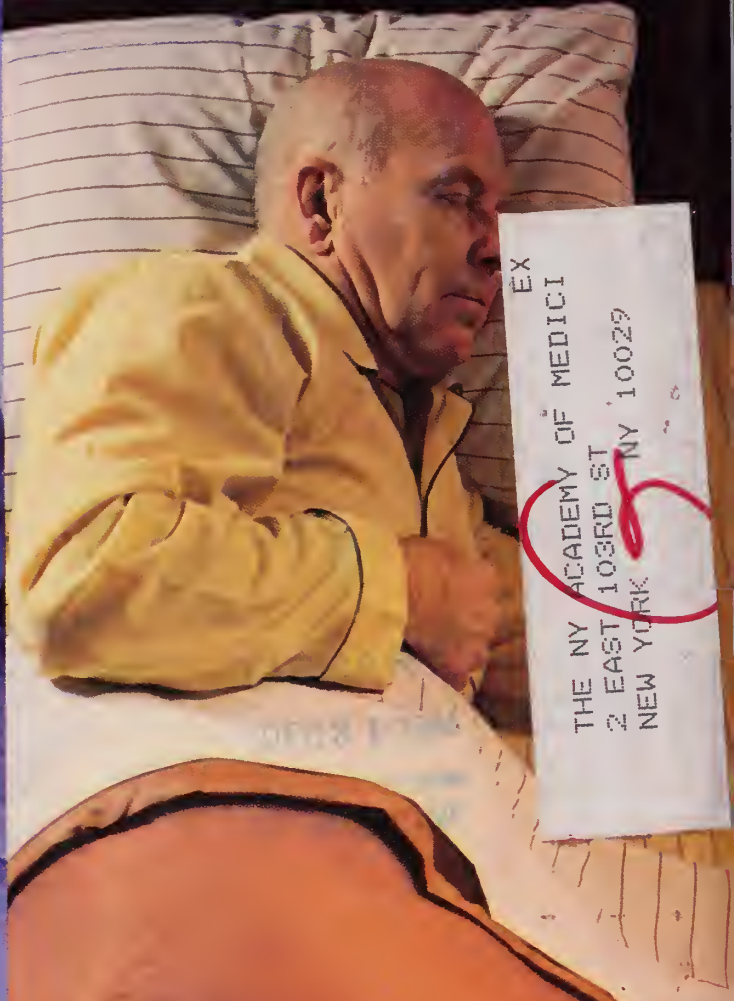
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